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# DEPARTMENT OF THE AIR FORCE

JUSTIFICATION OF ESTIMATES FOR FISCAL YEAR 1986  
SUBMITTED TO CONGRESS FEBRUARY 1985

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Aircraft Procurement, Air Force

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DEPARTMENT OF THE AIR FORCE  
AIRCRAFT PROCUREMENT, AIR FORCE

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*This document provides justification of Air Force budget estimates for FY 86*

AIRCRAFT PROCUREMENT, AIR FORCE

For construction, procurement, and modification of aircraft and equipment, including armor and armament, specialized ground handling equipment and training devices, spares parts, and accessories therefor; specialized equipment; expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to the approval of title; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes including rents and transportation of things; \$26,165,588,888, to remain available for obligation until September 30, 1988 (5 U.S.C. 3189; 18 U.S.C. 2271-79; 2353, 2386, 2663, 2672, 2672a, 8812, 8862, 9501-02, 9505, 9531-32, 9741-42; 31 U.S.C. 649c, 718; 50 U.S.C. 451, 453, 455; Department of Defense Appropriation Act, 1985, additional authorizing legislation to be proposed).

*etc.*  
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Aircraft Procurement, Air Force  
Program and Financing (in thousands of dollars)

04 Feb 85

		Budget Plan (amounts for PROCUREMENT actions programmed)			Obligations		
Identification code		1984 actual	1985 est	1986 est	1984 actual	1985 est	1986 est
Program by activities							
Direct program							
00 0101	Combat aircraft	10,088,430	12,710,800	11,639,800	9,367,473	11,808,898	11,524,184
00 0201	Airlift aircraft	1,528,400	1,932,030	2,438,900	1,512,929	1,732,115	2,120,870
00 0301	Trainer aircraft	5,075	128,000	208,100	5,800	93,714	171,730
00 0401	Other aircraft	172,400	219,800	540,000	155,953	207,336	457,196
00 0501	Modification of inservice aircraft	2,703,900	3,074,735	2,917,817	1,993,894	3,484,959	3,129,209
00 0601	Aircraft spares and repair parts	4,599,100	5,325,900	4,934,581	4,561,005	5,070,598	4,897,189
00 0701	Aircraft support equipment and facilities	2,221,610	2,688,981	3,490,302	1,885,778	2,622,543	3,291,267
00 9101	Total direct program	21,317,915	26,078,066	26,185,500	19,482,872	24,823,163	25,591,445
01 0101	Reimbursable program	195,089	279,020	290,110	214,340	328,136	297,814
10 0001	Total	21,513,004	26,357,086	26,455,610	19,677,192	25,151,299	25,889,359
Financing							
Offsetting collections from							
11 0001	Federal funds(-)	-111,643	-38,500	-37,714	-113,346	-38,500	-37,714
13 0001	Trust funds(-)	-93,327	-213,020	-223,595	-8,183	-213,020	-223,385
14 0001	Non-Federal sources(-)	-119	-29,500	-29,311	-182	-29,500	-29,011
17 0001	Recovery of prior year obligations(-)				-259,556		
Unobligated balance available, start of year							
21 4002	For completion of prior year budget plans				-6,081,806	-7,939,581	-9,145,346
21 4003	Available to finance new budget plans	-323,100	-15,500		-323,100	-15,500	
21 4007	Reprogramming from/to prior year budget plan	-164,215					
22 4001	Unobligated balance transferred, net	6,000	15,500		6,000	15,500	
Unobligated balance available, end of year							
24 4002	For completion of prior year budget plans				7,639,361	9,145,346	9,711,999
24 4003	Available to finance subsequent year budget	15,500			15,500		
29 0001	Unobligated balance lapsing	461,315			461,315		
39 0001	Budget authority	21,303,413	26,078,066	26,185,500	21,303,413	26,078,066	26,185,500
Budget authority							
40 0001	Appropriation	21,080,110	26,188,255	26,165,500	21,080,110	26,188,256	26,165,500
41 0001	Transferred to other accounts(-)	-69,795	-110,200		-69,795	-110,200	
43 0001	Appropriation (adjusted)	21,010,315	26,078,066	26,165,500	21,010,315	26,078,066	26,165,500
50 0001	Reappropriation	323,100			323,100		

Aircraft Procurement, Air Force  
Program and Financing (in Thousands of dollars)

04 Feb 85

Identification code	57-3010-0-1-051	1984 actual	1985 est	1986 est
Relation of obligations to outlays				
71 0001	Obligations incurred, net	19,555,501	24,872,279	25,599,249
72 4001	Obligated balance, start of year	17,488,385	23,708,487	33,260,646
74 4001	Obligated balance, end of year	-23,708,487	-33,260,646	-40,537,295
77 0001	Adjustments in expired accounts	-84,012		
78 0001	Adjustments in unexpired accounts	-259,558		
90 0001	Outlays	12,991,650	15,318,100	18,322,600

Aircraft Procurement, Air Force  
Object Classification (in thousands of dollars)

04 Feb 55

Identification code	57-3010-0-1-051	1954 actual	1955 est	1956 est
Direct obligations				
13 1001	Equipment	19,462,432	24,823,163	25,521,445
15 9001	Total Direct obligations	19,462,432	24,823,163	25,521,445
Reimbursable obligations				
23 1001	Equipment	214,340	328,126	297,914
29 9001	Total Reimbursable obligations	214,340	328,126	297,914
99 9901	Total obligations	19,677,122	25,151,294	25,819,359

Aircraft Procurement, Air Force  
Program and financing (in thousands of dollars)

04 Feb 55  
FISCAL YEAR 1952

		Budget Plan (amounts for PROCUREMENT actions programmed)			Obligations		
Identification code		1954 actual	1955 est	1956 est	1954 actual	1955 est	1956 est
Program by activities							
Direct program							
00 0101	Combat aircraft				559,631		
00 0201	Airlift aircraft				3,909		
00 0401	Other aircraft				16,061		
00 0501	Modification of in-service aircraft				283,117		
00 0601	Aircraft spares and repair parts				532,019		
00 0701	Aircraft support equipment and facilities				107,540		
00 9101	Total direct program				1,492,266		
01 0101	Reimbursable program				11,312		
10 0001	Total				1,493,705		
Financing							
Offsetting collections from							
11 0001	Federal funds(-)				1,042		
13 0001	Trust funds(-)				84,893		
14 0001	Non-Federal sources(-)				13		
7 0001	Recovery of prior year obligations(-)				105,394		
Unobligated balance available, start of year							
21 4002	For completion of prior year budget plans				385,475		
21 4003	Available to finance new budget plans	-12,900			-12,900		
2 4007	Reprogramming from/to prior year budget plan	-154,215					
22 4001	Unobligated balance transferred, net	18,900			18,900		
20 0001	Unobligated balance labeling	158,215			152,215		
35 0001	Budget authority						



Aircraft Procurement, Air Force  
Program and Financing (in thousands of dollars)

04 Feb 85  
FISCAL YEAR 1983

		Budget Plan (amounts for PROCUREMENT actions programmed)			Obligations		
Identification code	57-3010-0-1-051	1984 actual	1985 est	1986 est	1984 actual	1985 est	1986 est
Program by activities							
Direct program							
03 0101	Combat aircraft				1,130,859	753,957	
00 0201	Airlift aircraft				44,636	261,602	
00 0401	Other aircraft				23,749	11,703	
00 0501	Modification of inservice aircraft				234,003	469,004	
00 0601	Aircraft spares and repair parts				541,339	540,031	
00 0701	Aircraft support equipment and facilities				200,115	178,819	
00 9101	Total direct program				2,204,501	2,235,316	
01 0101	Reimbursable program				105,595	64,532	
10 0001	Total				2,310,196	2,299,848	
Financing							
Offsetting collections from							
11 0001	Federal funds(-)				-2,745		
13 0001	Trust funds(-)				10,271		
14 0001	Non-Federal sources(-)				-74		
17 0001	Recovery of prior year obligations(-)				-124,162		
21 4002	Unobligated balance available, start of year						
	For completion of prior year budget plans				4,493,333	-2,299,848	
21 4003	Available to finance new budget plans	-310,200			-310,200		
22 4001	Unobligated balance transferred, net	310,200			310,200		
	Unobligated balance available, end of year						
24 4002	For completion of prior year budget plans				2,229,846		
39 0001	Budget authority						

Air Force Procurement, Air Force  
Program and Financing (in thousands of dollars)

04 Feb 85  
FISCAL YEAR 1984

		Budget (amounts for PROCUREMENT activities projected)			Obligations		
Identification code		1984 actual	1985 est	1986 est	1984 actual	1985 est	1986 est
Program by activities							
Direct program							
00 0101	Combat aircraft	10 086,430			7,667,183	1,415,321	1,005,926
00 0201	Airlift aircraft	1 526,400			1,464,295	15,603	26,302
00 0301	Trainer aircraft	8,075			8,800	159	116
00 0401	Other aircraft	172,400			116,143	32,432	23,825
00 0501	Modification of inservice aircraft	2,703,900			1,476,774	717,927	509,199
00 0601	Aircraft spares and repair parts	4,599,100			3,517,647	623,438	457,995
00 0701	Aircraft support equipment and facilities	2,221,510			1,828,143	399,784	293,683
00 8101	Total direct program	21 317,915			15,775,985	3,224,684	2,317,046
01 0101	Reimbursable program	195,089			97,306	56,431	41,352
10 0001	Total	21,513 004			15,873,291	3,281,315	2,358,398
Financing							
Offsetting collections from							
11 0001	Federal funds(-)	-111,643			-111,643		
13 0001	Trust funds(-)	-63,327			-63,327		
14 0001	Non-Federal sources(-)	-119			-119		
Unobligated balance available start of year							
21 4002	For completion of prior year budget plans					-5,639,713	-2,358,398
21 4003	Available to finance new budget plans		-15 500			-15,500	
22 4001	Unobligated balance transferred, net	-323,100	13 000		-323,100	15,500	
Unobligated balance available, end of year							
24 4002	For completion of prior year budget plans				5,639,713	2,358,398	
24 4003	Available to finance subsequent year budget	15,500			13,500		
25 0001	Unobligated balance lapsing	323,100			323,100		
39 0001	Budget authority	21,333,415			21,333,415		
Budget authority							
40 0001	Appropriation	21,080,110			21,080,110		
41 0001	Transferred to other accounts(-)	-69,795			-69,795		
43 0001	Appropriation (adjusted)	21,010,315			21,010,315		
50 0001	Reappropriation	323,100			323,100		

Aircraft Procurement, Air Force  
Program and Financing (in Thousands of dollars)

04 Feb 85  
FISCAL YEAR 1985

Identification code	57-301C-0-1-051	Budget Plan (amounts for PROCUREMENT actions programmed)			Obligations		
		1984 actual	1985 est	1986 est	1984 actual	1985 est	1986 est
<b>Program by activities</b>							
<b>Direct program</b>							
00 0101	Combat aircraft		12,710,600		9,437,620	1,874,813	
00 0201	Airlift aircraft		1,932,000		1,434,510	284,970	
00 0301	Trainer aircraft		126,000		93,555	18,585	
00 0401	Other aircraft		219,800		163,201	32,421	
00 0501	Modification of inservice aircraft		3,074,785		2,283,028	453,531	
00 0601	Aircraft spares and repair parts		5,325,900		3,907,109	776,160	
00 0701	Aircraft support equipment and facilities		2,688,981		2,043,940	406,035	
00 9101	Total direct program		26,078,066		19,362,963	3,816,515	
01 0101	Reimbursable program		279,020		207,173	41,155	
10 0001	Total		26,357,086		19,570,136	3,857,670	
<b>Financing</b>							
<b>Offsetting collections from</b>							
11 0001	Federal funds(-)		-36,500		-36,500		
13 0001	Trust funds(-)		-213,020		-213,020		
14 0001	Non-Federal sources(-)		-29,500		-29,500		
21 4002	Unobligated balance available, start of year						-6,786,950
	For completion of prior year budget plans						
24 4002	Unobligated balance available, end of year						
	For completion of prior year budget plans				6,786,950	2,899,280	
39 0001	Budget authority		26,078,066		26,078,066		
<b>Budget authority</b>							
40 0001	Appropriation		26,186,266		26,186,266		
41 0001	Transferred to other accounts(-)		-10,200		-10,200		
43 0001	Appropriation (adjusted)		26,176,066		26,176,066		

Aircraft Procurement, Air Force  
Program and Financing (in Thousands of dollars)

04 Feb 85  
FISCAL YEAR 1986

Identification code 57-3010-0-1-051		Budget Plan (amounts for PROCUREMENT actions proposed)			Obligations		
		1984 actual	1985 est.	1986 est	1984 actual	1985 est	1986 est
<b>Program by activities</b>							
Direct program							
00 0101	Combat aircraft			11,639,800			8,643,415
00 0201	Altilift aircraft			2,436,900			1,809,398
00 0301	Trainer aircraft			206,100			153,029
00 0401	Other aircraft			540,000			400,850
00 0501	Modification of inservice aircraft			2,917,817			2,166,279
00 0601	Aircraft spares and repair parts			4,934,581			3,663,034
00 0701	Aircraft support equipment and facilities			7,490,302			2,591,549
00 9101	Total direct program			26,165,500			19,427,984
01 0101	Reimbursable program			290,110			215,407
10 0001	Total			26,455,610			19,643,291
<b>Financing</b>							
Offsetting collections from							
11 0001	Federal funds(-)			-37,714			-37,714
13 0001	Trust funds (-)			-223,385			-223,385
14 0001	Non-Federal sources(-)			-29,011			-29,011
24 4002	Unobligated balance available, end of year For completion of prior year budget plans						6,812,319
40 0001	Budget authority (Appropriation)			26,165,500			26,165,500

(In Thousands of Dollars)

Program Requirement - FY 87 ...	\$ 5,825,300
Program Requirement - FY 86 ...	11,639,800
Program Requirement - FY 85 ...	12,710,600
Program Requirement - FY 84 ...	10,088,430

ACTIVITY: Combat Aircraft

#### PART I. PURPOSE AND SCOPE

This activity provides for the procurement of new aircraft, associated flight simulation devices, and other peculiar training and support equipment for modernization of the U.S. combat forces and to improve the efficiency of training programs.

Combat aircraft are required to attain and maintain air superiority, interdict enemy supply lines, provide reconnaissance of enemy forces, and furnish close air support to ground forces. The aircraft can be used to counter a variety of threats and offer options of response ranging from the use of diversified conventional weapons through, in the case of U.S. forces, a variety of nuclear weapons.

The FY 1986 and FY 1987 programs include funds for the procurement of ACM Integration, B-1B, F-15, F-16, MC-130H, KC-10A, and E-3A production shut-down costs. The programs also include funds for procurement of flight simulators for F-15 and F-16 aircraft. The B-1B, F-15A, and F-16 requests incorporate the continuation of multiyear procurement efforts.

#### PART II. JUSTIFICATION OF FUNDS REQUESTED

The FY 1986 and FY 1987 funding requirements for procurement of combat aircraft, related support items, and advance procurement in support of the following year's program are: FY 1986 - \$11,639.8 million; FY 1987 - \$5,825.3 million. Details are as follows:

##### ACM Integration (FY 1986 - \$122.8 million):

The Advanced Cruise Missile (ACM) is an air launched, long range, accurate, nuclear armed air-to-ground cruise missile planned for use on the bomber force. As one of the many weapons in the manned bomber's arsenal, the ACM stresses the enemy defense, provides long range hard target kill capability, and enhances the manned bomber's effectiveness and flexibility. The ACM provides for substantial improvements in range, survivability, accuracy, and targeting flexibility.

##### B-1B (FY 1986 - 48 aircraft, \$5,461.8 million):

The B-1B is a strategic multi-role weapon system which maximizes range and payload capabilities, and is able to perform the mission of conventional bomber, cruise missile launch platform, and nuclear weapons delivery system in both the tactical and strategic roles. Production of the B-1B addresses U.S. requirements to increase our targeting flexibility, to redress the relative decline of our strategic capabilities, and to revitalize our strategic deterrent. The B-1B program retains the important military characteristics of the manned bomber by modernizing the element of the strategic TRIAD capable of seeking out and destroying imprecisely-located, highly-valued targets. The combination of B-1B's higher penetrating speed, reduced radar cross-section, and advanced electronic countermeasures will make it capable of serving as a penetrating bomber well into the 1990s when the Advanced Technology Bomber is projected to become available. Additionally, introduction of the B-1B retains in one arm of the

U.S. strategic forces an accurate, global, non-nuclear capability which preserves our flexibility to adapt to unforeseen contingencies with a timely and economic projection of power. The B-1B will be capable of performing the conventional bomber and cruise missile carrier mission well into the next century. This request is for the continuation of a multiyear procurement program approved by Congress. This multiyear procurement will generate the necessary savings to ensure that the B-1B program of 180 aircraft, related initial spares, and research, development, test and evaluation can be achieved within \$28,540.8 million (FY 1981 dollars).

F-15C/D/E (FY 1986 - 48 aircraft, \$2,138.9 million; FY 1987 - 48 aircraft, \$2,182.2 million):

The F-15 is a twin engine, single crew, fixed swept wing aircraft designed specifically for high maneuverability in air-to-air combat. The F-15 is the first U.S. fighter aircraft to possess a takeoff thrust-to-weight ratio greater than one-to-one. Its two Pratt & Whitney F100 turbofan engines are each capable of thrust in the 25,000 lb. class. The F-15's low wing loading, the ratio of aircraft weight to its wing area, in combination with its high thrust-to-weight ratio, enables the F-15 to turn very tightly without losing air speed. The F-15's clean wing, with inboard flaps and outboard ailerons, provides the most efficient minimum-drag configuration at high lift in the transonic speed range. The F-15 is able to reach a dash speed of Mach 2.5. It is equipped with a balanced mix of medium and short range missiles and a rapid firing 20mm cannon. The avionics system includes an advanced radar, a visual head-up display, and an automatic built-in test system. Air-to-air tasks include continental air defense, combat air patrol, escort and fighter sweeps in or out of the enemy's ground-controlled intercept environment. It has replaced the F-4E as the primary air superiority fighter in the force structure. The F-15 has the maneuverability, armament, and fire control needed to surpass the expected capability of enemy aircraft in the 1980s. The E model has been selected as the Air Force Dual Role Fighter. Procurement of 48 F-15 C/D and 8 F-15 E aircraft is requested in FY 1986.

F-16C/D (FY 1986 - 180 aircraft, \$3,989.8 million; FY 1987 - 180 aircraft, \$3,463.7 million):

The F-16 is a single engine, lightweight, high performance, multi-mission fighter capable of performing a broad spectrum of tactical air warfare tasks. The design characteristics of the F-16 are such as to permit high sortie rates with rapid turn around, minimum manpower/logistics burden, and exceptional air combat maneuvering performance, coupled with a potent air-to-ground weapons delivery capability. The U.S. Air Force plans to buy a total of 2,651 F-16s through FY 1992 to replace aging F-4s and to modernize the Air Reserve Forces. The F-16 will also enable modernization and standardization of equipment among those allied countries which choose to replace their aging tactical fighter forces with F-16s. This request for 180 aircraft is the first year's buy of the second four-year F-16 multiyear procurement and includes long lead for the 180 aircraft buy in FY 1987.

KC-135A (Advanced Tanker/Cargo Aircraft) (FY 1986 - 12 aircraft, \$447.8 million; FY 1987 - 8 aircraft, \$124.1 million):

The KC-135A Advanced Tanker/Cargo Aircraft is a production-line McDonnell Douglas DC-10 modified only as necessary to provide an air refueling capability and to fully exploit the aircraft's cargo carrying potential. It is an aircraft of unique versatility, capable of providing both long range air refueling and airlift support. Its air refueling off-load capability will permit deployment and reinforcement of U.S. military forces without reliance on uncertain intermediate foreign basing rights. Combining its large cargo and fuel off-load potential, the KC-135A provides a capability to deploy tactical fighter forces and their support equipment simultaneously, ready to fight. Additionally, the KC-135A will significantly expand U.S. strategic airlift capacity, particularly with respect to long range movement of oversize cargo, when not otherwise involved in air refueling operations. This request is for the fourth increment of a multiyear procurement program for 44 aircraft.

KC-130R (FY 1986 - 1 aircraft, \$79.5 million; FY 1987 - 2 aircraft, \$115.4 million):

This aircraft is a medium size transport used for special tactical missions. It is powered by four T56-A-15 turboprop engines. It has a ferry range of approximately 4,200 nautical miles, a service ceiling of 35,000 feet, and a cruise speed of 290 knots. Its cargo compartment length, width and height are 41, 18, and 9 feet respectively, and can carry a payload of 38,000 pounds. The normal crew of seven consists of a pilot, co-pilot, flight engineer, one navigator, electronic warfare officer, and two loadmasters. Aircraft features include an integral ramp and cargo door, crew and cargo compartment pressurization, ground and in-flight air conditioning, thermal de-icing system, single-point refueling, and auto pilot. Additional features of this specially modified C-130 are precision navigation, terrain following radar, Electronic Counter Measures (ECM) subsystem and in-flight refueling.

E-3A (FY 1987 - \$19.9 million):

The funds identified in FY 1987 are required for production close-down of the E-3A acquisition program.

(In Thousands of Dollars)	
Program Requirement - FY 87 ...	\$2,441,788
Program Requirement - FY 86 ...	2,436,988
Program Requirement - FY 85 ...	1,932,003
Program Requirement - FY 84 ...	1,526,468

ACTIVITY: Airlift Aircraft

#### PART I PURPOSE AND SCOPE

This activity provides for the procurement of new aircraft and support items to continue improvement of the U.S. airlift forces. The FY 1986 and FY 1987 programs include funds for the procurement of C-5B, C-20A and C-17 aircraft.

#### PART II JUSTIFICATION OF FUNDS REQUESTED

The FY 1986 and FY 1987 fund requirements for procurement of airlift aircraft, related support items, and advance procurement funding in support of the following year's program are: FY 1986 - \$2,436.9 million; FY 1987 - \$2,441.7 million. Details are as follows:

C-5B (FY 1986 - 16 aircraft, \$2,258.1 million; FY 1987 - 21 aircraft, \$2,196.8 million):

The C-5 is a service-proven, wide-bodied, intertheater airlift aircraft that can carry the full spectrum of military air cargo. It will have four TF39-GE-1C turbofan engines and updated avionics. It is the world's largest military airlifter; it can onload/offload cargo at truckbed height or ground level at each end of the cargo compartment. Intertheater airlift is required to project and sustain combat forces in an urgent manner. Deficiencies in our airlift capability are documented in numerous studies, including the recently completed Congressionally Mandated Mobility Study. Additional C-5B procurement will make a substantial near-term improvement in our capability to rapidly reinforce NATO and to meet the mobility needs of the Central Command.

C-20A (FY 1986 - 8 aircraft, \$168.8 million):

The Special Air Mission C-20A aircraft is an FAA Gulfstream III certified business jet aircraft. C-20A capabilities exceed a 2400 nautical mile (NM) unrefueled range with National Business Aircraft Association (NBAA) reserve (200NM alternate), and will operate from 5000 foot runways with 14 to 18 passengers plus a crew of five in an executive configuration. Useful life will be at least 20 years. The C-20A will not have a combat role, however, during wartime the C-20A will continue to perform support missions into areas that include theaters of war. The C-20A will replace the seven Military Airlift Command (MAC) C-140B aircraft assigned to the 89th Military Airlift Wing (MAW) at Andrews AFB, MD and the four C-140B aircraft assigned to the 59th Military Airlift Squadron (MAS) at Ramstein AB, Germany. The C-140B is being replaced because of its increasing operating costs. These 1950s vintage airplanes and engines entail high fuel consumption and difficulty in obtaining spare/replacement parts. Its limited passenger capacity and lack of coast-to-coast range have resulted in the forced, inefficient use of the 42 seat C-9 aircraft for a number of missions. The Special Air Mission provides worldwide air transportation for the President and Vice President of the United States, Cabinet members, members of Congress, and other high ranking dignitaries of the United States and foreign governments. In addition to the usual C-140B missions, the C-20A could be dispatched on overseas missions if the range and passenger requirements do not require the use of the larger C-135s and C-137s.



C-17 (FY 1987 - Advance Buy: 2,444.9 million):

FY 87 funds are for advance buy requirements to support planned procurement of two aircraft in FY 88. The C-17 is a major initiative to improve our rapid deployment capability and correct deficiencies in the current airlift system. The C-17 will provide the last increment of intertheater airlift capability to reach the minimum level recommended in the Congressionally mandated Mobility Study (66 million ton miles per day). It will provide the lift capability to move heavy mechanized Army/Marine Corps equipment in-theatre, replace the capability lost from retiring C-130 and C-141 aircraft beginning in the 1990s and modernize the airlift force. C-17 will meet the airlift needs of the United States and substantially increase our force projection capability, both quantitatively and qualitatively.

(In Thousands of Dollars)

Program Requirement - FY 87 ...	\$563,200
Program Requirement - FY 86 ...	286,188
Program Requirement - FY 85 ...	126,888
Program Requirement - FY 84 ...	6,875

ACTIVITY: Trainer Aircraft

#### Part I. Purpose and Scope

This activity provides for the procurement of new aircraft, associated flight simulation devices, and support equipment required for flight training. The FY 1986 and FY 1987 programs are for procurement of the T-46A and Tanker, Transport, Bomber trainer aircraft.

#### Part II. Justification of Funds Requested

The FY 1986 and FY 1987 funding requirements for procurement of trainer aircraft, related support items, and advance procurement funding in support of the following year's program are: FY 1986 - \$286.1 million; FY 1987 - \$563.2 million. Details are as follow:

T-46A (Next Generation Trainer) (FY 1986 - 33 aircraft, \$286.1 million; FY 1987 - 95 aircraft, \$547.5 million):

The T-46A program is a development and acquisition effort to replace the operationally deficient T-37 aircraft to ensure continued primary flight training capability through and beyond FY 1986. Forecast increases in USAF pilot training and the fact that the aging T-37 will begin to reach fleet insufficiency around 1986 dictate an Initial Operational Capability for the T-46A in 1987. The essential design characteristics include twin engines, side-by-side seating, and pressurization with significant improvements in performance (range, climb capability, sustained "g"), maintainability, and noise pollution control.

Tanker, Transport, Bomber Trainer (TTBTS) (FY 1987 - 1 aircraft, \$15.7 million):

The FY 1987 funds purchase one aircraft to begin implementation of specialized undergraduate pilot training in Air Training Command. Following a common primary training program in the T-37/T-46, students will be selected for the Fighter, Attack, Reconnaissance (FAR) track and receive basic training in the T-38, or for the TTB track and receive basic training in a TTB trainer. The TTB aircraft is an off-the-shelf corporate jet which will provide tailored training. Student Pilots will develop skills needed by operational tanker, transport, and bomber units. The TTBTS will accommodate one instructor pilot and two students on a three hour pilot training mission.

(In Thousands of Dollars)

Program Requirement - FY '7 ...	\$2,787,866
Program Requirement - FY 86 ...	548,600
Program Requirement - FY 85 ...	219,800
Program Requirement - FY 84 ...	172,400

ACTIVITY: Other Aircraft

PART I PURPOSE AND SCOPE

This activity provides for the procurement of HH-68A, Flight Inspection Aircraft Replacement, Aurora and TR-1/U-2R aircraft in FY 1986 and FY 1987.

PART II JUSTIFICATION OF FUNDS REQUESTED

The FY 1986 and FY 1987 fund requirements for procurement of other aircraft equipment, related support equipment, and advance procurement funding in support of the following year's program are: FY 1986 - \$548.8 million; FY 1987 - \$2,787.1 million. Details are as follow:

HH-68A (FY 1986 - 3 aircraft, \$116.8 million; FY 1987 - 25 aircraft, \$228.1 million):

The HH-68A is a derivative of the Army UH-60A Black Hawk and the Navy SH-60B Seahawk. Changes to the UH-60A will include extended range (including air refueling capability), more powerful engines and transmission and improved avionics for precision low level navigation at night and under adverse weather conditions. Development, production and support costs will be limited by maintaining commonality with the UH-60A and SH-60B using common components to the maximum extent possible. The HH-68A will provide the capability to rescue downed combat aircrews in current and future threat environments. The HH-68A is designed specifically for clandestine, single ship combat rescue operations.

Flight Inspection Aircraft Replacement (FY 1987 - 1 aircraft, \$26.6 million):

Flight Inspection Aircraft will be an off the shelf corporate jet with an improved automated inspection panel. They will replace the current fleet of four C-140's and two T-39s with seven new aircraft. The mission of these aircraft is to ensure the accuracy of traffic control and landing systems and augment FAA flight inspection during peacetime and establish the Air Traffic control environment during contingencies and exercises.

Aurora (FY 1986 - \$22.1 million; FY 1987 - \$2,272.4 million):

This is classified. Special access is required for program details.

TR-1/U-2R (FY 1986 - 2 aircraft, \$343.9 million; FY 1987 - 2 aircraft, \$118.8 million):

The TR-1/U-2 is a single engine, single crew, fixed wing aircraft specifically designed for high altitude, standoff surveillance missions. Except for three dual-seat training aircraft, all TR-1 aircraft can be equipped with either a reconnaissance sensor package or the Precision Location Strike System (PLSS) equipment. The TR-1 is the tactical variant of the highly reliable, versatile U-2R aircraft currently in the strategic reconnaissance inventory. The tactical reconnaissance TR-1, equipped with the latest sensors, will provide a battlefield surveillance system available to the theater/tactical commander into the 1990s. The U-2R is a national reconnaissance asset used in direct support of national command authorities and/or in direct support of theater commanders. Pratt & Whitney modified J75 engines, available from within the Air Force inventory, provide high maneuverability, and sufficient power for accessory/sensor operations.

(In Thousands of Dollars)

Program Requirement - FY 87 ...	4,825,200
Program Requirement - FY 86 ...	2,917,600
Program Requirement - FY 85 ...	3,074,600
Program Requirement - FY 84 ...	2,703,900

#### ACTIVITY. Modification of In-Service Aircraft

##### PART I PURPOSE AND SCOPE

This budget activity provides for modification and modernization of in-service aircraft, training devices and support equipment necessary for safety, extension of service life, and to incorporate operational improvements after an aircraft has entered service. The program is designed to maintain the Air Force aircraft inventory at the most modern configuration level at the minimum cost.

##### PART II JUSTIFICATION OF FUNDS REQUESTED

Modifications are necessary to enable the strategic offense, defense, tactical, and support forces to maintain superiority over hostile forces, to extend the active service life of aircraft, and to keep abreast of changing mission requirements. To ensure maximum safety for the aircraft and crews and to enhance capabilities of aircraft in a combat environment, priority modifications are necessary. Modifications are closely examined and priorities established so that only those most essential are accomplished with the funds available.

The FY 1986 program, to a large extent, consists of follow-on requirements for previously initiated modifications. In FY 1986, we are requesting a continuing ramp up of the production rates to re-engine the KC-135 tanker aircraft with new fuel efficient, high by-pass turbofan engines. The FY 1985 negotiations have produced a significantly lower unit aircraft kit cost over that previously projected, and this trend is expected to continue through the ramp up period. There is also significant effort included to improve aircraft survivability in a hostile environment by an upgrade to the electronic defensive capabilities on various aircraft. Funding is also requested to continue enhancement of peacetime material readiness of an aging aircraft inventory. Other significant efforts impacting the program total include:

- (1) Modifications to provide cargo convertibility to the Civil Reserve Air Fleet widebody aircraft to increase the strategic mobility capabilities.
- (2) Service life extension modifications to allow the aircraft to meet their programmed service life requirements.

(3) Enhancements in the E-3A Airborne Warning and Control Aircraft Capability.

(4) Avionics Modernization Program for the F/FR-111 aircraft to upgrade the bomb navigation system to improve operational readiness by replacing high failure, high cost, and technologically outdated components.

Aircraft modification kits are procured on a phased basis, lead time away from installation, which is scheduled concurrently with normal depot maintenance programs to the maximum extent possible. Complex modifications are installed at Air Force depots or contractor facilities, concurrently with programmed depot maintenance. Where the installation tasks are less complex or require a relatively small number of man-hours, they are accomplished in the field by assigned personnel or specialized teams dispatched from the depot or provided by contractors.

During FY 1985, the Air Force has aggressively pursued the use of existing modern hardware to upgrade aging aircraft components and competitive procurement for modification hardware to control costs and maximize the benefits of the resources provided for modifications. While much of this effort has resulted in slower obligations, it has provided firm priced contracts at more attractive prices. The Air Force remains committed to using the pressure of the competitive marketplace to control costs.

B-52 (FY 1985 - \$463.6 million; FY 1987 - \$795.7 million). The FY 1986 program includes: continuation of modifications for Pave Mint electronic countermeasures equipment for the B-52G in the amount of \$62.8 million, ALQ-172 electronic countermeasures equipment for the B-52H in the amount of \$113.0 million, maintainability and supportability improvements for the strategic radar in the amount of \$62.7 million, integration of internal Air Launched Cruise Missile Carriage capability in the amount of \$75.0 million, and \$50.5 million for several reliability and supportability improvements necessary to maintain the aircraft in a safe operating condition.

The FY 1987 program continues existing modifications and will initiate incorporation of VLF/LF receivers, and the addition of a synthetic aperture radar in the conventional mission B-52Gs.

FB-111 (FY 1986 - \$13.2 million; FY 1987 \$11.0 million). The FY 86 program initiates modifications to upgrade AFSATCOM terminals and electronic countermeasures systems.

B-1B (FY 1986 - \$5.1 million; FY 1987 - \$75.9). The FY 1986 program initiates modifications to upgrade AFSATCOM terminals.

A-7 (FY 1986 - \$3.4 million; FY 1987 - \$20.3 million). FY 1986 funding provides the AIM-9L missile capability for the A-7. FY 1987 funding continues the AIM-9L program and initiates a variety of avionics system reliability and maintainability programs.

A-10 (FY 1986 - \$87.8 million; FY 1987 - \$82.9 million). The FY 1986 program includes follow-on modifications for a Turbine Engine Monitoring System in the amount of \$26.8 million, correction of deficiencies to the TF34 engines Hot Section in the amount of \$30.1 million, and \$14.3 million for various reliability/supportability improvements. Incorporation of AIM-9L Missile Carriage capability for \$16.6 million is also included. The TF-34 Hot Section modification utilizes a multiyear contract with Economic Order Quantity (EOQ) advance procurement of components.

The FY 1987 program continues the current of modifications started in previous fiscal years and initiates integration of aircrew chemical defense equipment.

F/R-4 (FY 1986 - \$17.2 million; FY 1987 - \$396.0 million). The FY 1986 program continues funding for: update to the ALR-74 Radar Warning Receiver on the R/F-4E series in the amount of \$65.9 million, \$45.0 million for a reliability/supportability update to the R/F-4C radar, \$18.2 million for replacement of Inertia Navigation System on the F-4S Wild Weasel, and \$25.7 million for various safety/reliability/supportability improvements. New initiatives requested are structural fatigue corrections (\$3.2 million), and a simulator upgrade for the F-4E/G for \$19.5 million.

The FY 1987 program continues existing modifications and initiates a Wild Weasel performance update and various reliability/supportability improvements.

F-5 (FY 1986 - \$25.7 million; FY 1987 - \$3.9 million). The FY 1986 program includes \$.7 million for safety improvements. A major new initiative to improve the training capability of the aggressor squadron is included for \$25.0 million.

The FY 1987 program continues safety and reliability improvement programs begun in FY 1986.

F-15 (FY 1986 - \$141.6 million; FY 1987 - \$268.7 million). The FY 1986 program continues the Multi Stage Improvement Program to various series of the F-15 to provide continued combat effectiveness in the amount of \$134.1 million; and \$7.7 million for various safety, reliability, and maintainability improvements. Included in these improvements are to the Radar Receiver Pre-amplifier, the Actuator Input Arm, the Pitch Trim Control, and various other aircraft and engine improvements that are also being incorporated into the production line.

The FY 1987 program continues modifications initiated in previous fiscal years and initiates a new capability for Chem-Bio protection for crew members and improved Electronic Counter-counter Measures systems.

F-16 (FY 1986 - \$75.7 million; FY 1987 - \$365.2 million). In FY 1986, \$25.7 million continues the modification for the Operational Capability Upgrade on the 132 aircraft to be assigned to the Air Defense role, \$14.7 million for replacement of the vent type, main engine fuel pump with a gear type pump to improve the reliability necessary for a single engine aircraft and \$1.4 million to the power approach controls to correct some flight control problems. Funding of \$12.9 million is requested to provide improved reliability on the F100 engines, \$5.3M million for correction to the Radar Warning Receiver (RWR) Antenna Placement for more effective performance of the RWR equipment, and \$13.7 million for a variety of other reliability/supportability improvements for the F-16 A/B.

The FY 1987 program continues modifications started in previous fiscal years, initiates a safety improvement to the Backup Control System to provide an automatic start capability, and initiates new capabilities for all Environment Identification Friend or Foe, Chem-Bio Protection for crew members, and the Multinational Staged Improvement Program for early F-16s.

F-111 (FY 1986 - \$294.5 million; FY 1987 - \$351.2 million). The FY 1986 program includes follow-on modifications for the Avionics Modernization Program (\$234.1 million), Pacer 30/100 Engine reliability improvements for the A, E, D, and F series (\$29.2 million), and various reliability/supportability improvements (\$6.0 million). Funding of \$16.0 million is for the initiation of a simulator upgrade program for the currently non-supportable F/FB-111 System.

The FY 1987 program continues existing modifications.

EF-111 (FY 1987 - \$26.2 million). The FY 1987 program initiates a performance upgrade program to provide g improvements to meet current and projected threats.

IR-1 (FY 1986 - \$11.7 million; FY 1987 - \$15.3 million). The FY 1986 program continues the modification for an Advanced Defense System (\$6.3 million), and initiates effort on the NAVSTAR Global Positioning System (GPS) system and an improved sensor system called Sensor Glass.

The FY 1987 program continues existing modification programs and initiates the avionics upgrade program.

C-5 (FY 1986 - \$9.8 million; FY 1987 - \$21.4 million). FY 1986 funding initiates efforts on reliability improvements for the auxiliary power unit (\$3.1 million) and engine pressure ratio system (\$3.8 million). SATCOM antennas will be added for \$1.5 million.

The FY 1987 program continues existing modifications and initiates miscellaneous reliability and maintainability modifications.

C-141 (FY 1986 - \$2.1 million; FY 1987 - \$56.3 million). Funding of \$2.1 million continues the procurement of five small dollar reliability and supportability programs started in FY 1985.

The FY 1986 program continues modifications begun in earlier years and initiates an autopilot/all weather landing system modification to improve its supportability (\$45.5 million).

T-38 (FY 1986 - \$40.1 million; FY 1987 - \$84.5 million). The FY 1986 funding begins a series of structural modifications to ensure the service life of the T-38 beyond the 1990's. These include a Cockpit Enclosure Program (\$5.7 million), Flight Loads Recorder (\$1.6 million), and Take Off Auxiliary Air Doors (\$1.7 million). A modification to replace the Simulator Terrain Model board will be initiated for \$9.8 million. Funding will continue for the Aluminum Flight Control System (\$4.0 million), command Ejection Seat Selection (\$5.1 million), Dorsal Longeron replacement (\$5.9 million) and Engine I-5 Amplifier Relocation (\$5.4 million).

The FY 1987 program continues these modifications and adds engine upgrades to insure operation beyond the 1990's (\$19.9 million).

C-12 (FY 1986 - \$5.0 million; FY 1987 - \$5.1 million). The FY 1986 program continues the conversion to a more current model of the PT-6A engine to maintain commonality with the Army and commercial version of the C-12.

The FY 1987 continues the conversion program.

C-130 (FY 1986 - \$201.0 million; FY 1987 - \$172.1 million). The FY 1986 program continues the following modification programs: Outer Wing Replacement to extend service life (\$73.6 million); Station Keeping Equipment Enhancement (\$16.5 million); improved capabilities for the Special Operations Forces (\$19.6 million); MC-130H Tanker Conversion for refueling of Combat Rescue and Special Operations Forces' heavy lift helicopter for wartime and contingency tasking (\$5.3 million); a Self-Contained Navigational System (SCNS) to allow the C-130 to operate without external navigation aids in battle zones where navigation aids may be shut down or jammed (\$39.2 million); replacement of existing anti-collision lights with strobe lights (\$1.6 million); the addition of a Flight Data Recorder Capability (\$3.0 million); the incorporation of Fuel Cell Foam to reduce fire hazard (\$4.8 million), and the conversion of the T56-A9 Engine Torquemeter to reduce vibration and wear in the amount of \$1.5 million and various reliability/supportability modifications in the amount of \$5.8 million. It also includes the conversion of one C-130H to the MC-130H Special Operations Forces latest configuration in lieu of procurement of an MC-130H aircraft (\$13.4 million).



FY 1987 continues existing modifications and initiates modifications to improve air rescue and recovery capabilities, improve communication anti-jam capabilities, and provide self-protection for special mission assigned C-130 aircraft.

C-135 (FY 1986 - \$868.1 million; FY 1987 - \$1,271.5 million). Funding of \$697.7 million in FY 1986 is for continuation of the re-engining of the KC-135 Tanker Aircraft with the CFM56 engine. This program, which also includes modification of over 25 subsystems necessary to incorporate the new engine provides an increase in off-load capability equivalent to one and one-half times the current KC-135A configuration. Other modification programs being continued are: Nuclear Hardening/UHF Radio Replacement for the EC-135 series (\$46.5 million), replacement of the lower wing skin to extend service life (\$38.9 million), incorporation of Standard VHF AM/FM radio capability into the tanker aircraft to meet the 25 KHz frequency band required for civilian/military air traffic control (\$2.8 million), replacement of the current, unreliable MC-1 Autopilot with an off-the-shelf state-of-the-art system in the amount of \$30.4 million; and incorporation of JRM Airborne Launch Control Capability into EC-135 A/C/G aircraft in the amount of \$32.3 million; new FY 86 initiatives include the NAVSTAR GPS capability (\$5.2 million), and AFSATCOM terminal upgrade (\$4.2 million).

The FY 1987 program continues existing modifications and initiates new programs for: Diversity Reception Equipment, EC-135C Groundwave Emergency Network capability, Milstar UHF Transition, the Integrated Operation Nuclear Detonation Detection System (IONDS), and upgrade of the simulator to aircraft configuration for effective ground training.

E-3A (FY 1986 - \$33.4 million; FY 1987 - \$67.2 million). The FY 1986 program includes \$25.5 million to continue funding a modification to provide HAVE QUICK A-NETS for an improved Anti-Jam capability; \$6.5 million to continue a reliability upgrade to the AN/APY-1 Radar System; and \$1.4 million for other reliability and maintainability improvements.

The FY 1987 program continues modifications initiated in previous fiscal years and initiates a new modification to include NAVSTAR GPS and improvements to the electronic mission systems to enhance air defense capability.

E-4B (FY 1986 - \$20.4 million; FY 1987 - \$49.9 million). Funding of \$18.0 million in FY 1986 initiates a modification to provide enhanced communications capabilities. Various small reliability/supportability improvements (\$0.4 million) will be continued.

The FY 1987 program initiates an upgrade to the Secure Data Terminal, Groundwave Emergency Net; MILSTAR Transition Systems, and other electronics and communications upgrade for improved connectivity.

H-53: FY 1986 - \$26.4 million; FY 1987 - \$57.0 million). Funds of \$1.9 million is requested to continue corrections to the lateral fore and aft servos. Miscellaneous reliability/supportability modifications in the amount of \$0.4 million are also in the FY 1986 program. A service life extension program will be initiated for \$18.8 million as well as \$5.3 million to replace the tail pylon.

FY 1987 continues existing modifications to extend the service life of the H-53 by upgrading the electrical system, accessory gear box support structure, automatic flight control system, nose gear box assembly, main rotor blade, and tail pylon and landing gear assembly. This service life extension modification is necessary to maintain the HH-53 helicopters in a mission capable condition.

Other Aircraft (FY 1986 - \$133.2 million; FY 1986 - \$466.6 million). In FY 1986, funds are required for follow-on costs of previously initiated modifications as follows: \$13.6 million for HAVE QUICK Anti-Jam Capability Improvements, \$12.6 million for the Standard Combined Altitude Radar Altimeter (CARA), \$10.7 million to improve the reliability of the ITU 205 Field Test Set for Pressure and Temperature used for testing all first line aircraft prior to take-off, \$5.2 million for reliability improvement to the AN/APN-59E (v) radar, \$26.0 million to replace HF radios with highly reliable state-of-the-art radios. \$35.0 million for the Standard Central Air Data Computer, \$16.8 million for correction of deficiencies in the AN/AIC-40 Chaff/Flare Dispensers, and \$13.3 million for various modifications on a variety of aircraft.

The FY 1987 program continues modifications initiated in previous fiscal years and initiates new efforts to improve the Anti-Jam Capability and provide Global Positioning System (GPS) Airborne terminals for a variety of aircraft. As the specific aircraft are identified, the funds will be moved to that aircraft system P-1 line item. A replacement for the AN/APN-69 Radar Beacon and replacement of the AN/APQ-122 radar are scheduled to preclude non-support posture due to non-availability of spare parts.

Classified Projects (FY 1986 - \$114.4 million; FY 1987 - \$119.8 million). These funds are required for the modification of a variety of aircraft and airborne systems used in classified missions which, because of their sensitivity, require the application of special management and security safeguards.

Civil Reserve Air Fleet (CRAF) - \$164.9 million). The 1986 program funds will provide for five cargo convertibility modifications to B-747 aircraft to enhance the strategic airlift capability.

The following table summarizes fund requirements for Fiscal Years 1985, 1986, and 1987 by aircraft/category:

(In Millions of Dollars)

Aircraft/Category	FY 1985	FY 1986	FY 1987
B-52	466.5	463.6	795.7
FB-111		13.2	11.0
B-1B		5.1	75.9
A-7	78.6	3.4	20.3
A-10	61.9	87.8	82.9
F/RP-4	260.7	174.2	396.0
F-5	3.9	25.7	3.9
F-15	115.1	141.8	268.7
F-16	60.2	73.7	385.2
F-111	206.5	294.5	354.2
EF-111			26.2
TR-1	24.0	11.7	15.8
C-5	3.1	9.8	21.4
C-141	14.9	2.1	56.3
T-38	10.2	40.1	84.5
C-12	1.3	5.0	5.1
C-27D			12.8
C-130	242.2	201.0	172.1
C-131	8.0		
C-135	826.5	868.1	1,271.5
E-3	78.1	3.4	67.2
E-4	15.0	20.4	49.9
KC-10		4.3	5.2
H-53	2.6	26.4	57.0
Other Aircraft	132.9	133.2	466.6
Classified Projects	152.6	114.4	119.8
Special Support Projects	181.1		
CRAF	<u>128.9</u>	<u>164.9</u>	
TOTAL	3,074.8	2,917.8	4,825.2

STATUS OF AIRCRAFT MODIFICATION PROGRAMS

FY 1985 Modification of Aircraft  
Programs as of 30 Dec 84  
(\$ in millions)

Program	Appropriated	Adjustments 1/	Total Program Value	Total Obligations	Total Expenditures
Budget Activity No. 5					
P-1 No. 31-59	\$2,556.3	-\$91.8	\$2,464.5	\$2,129.9	\$1,848.9

1/ Adjustments consist of: a share of Congressionally directed reductions for Independent Research and Development and Bid and Proposal costs (-\$24.0 million) and personnel security clearance costs (-\$6.8 million); a reappropriation to the FY 1984 Aircraft Procurement activity as financing from the KC-135 Re-engineing program (-\$14.0 million); Congressionally approved reprogrammings (-\$59.1 million); and below threshold reprogrammings (+\$2.7 million).

STATUS OF AIRCRAFT MODIFICATION PROGRAMS

FY 1984 Modification of Aircraft  
Programs as of 31 Dec 84  
(\$ in million)

<u>Program</u>	<u>Appropriated</u>	<u>Reprogrammings 1/</u>	<u>Total Program Value</u>	<u>Total Obligations</u>	<u>Total Expenditures</u>
Budget Activity No. 5					
P-1 No. 31-59	\$2,784.5	\$-.6	\$2,783.9	\$1898.4	\$257.8

1/ Adjustments result from a transfer of -2.5 million to the RDT&E appropriation and below threshold reprogramming (\$1.9 million)

STATUS OF AIRCRAFT MODIFICATION PROGRAMS

FY 1985 Modification of Aircraft  
Programs as of 31 Dec 84  
(\$ in million)

<u>Program</u>	<u>Appropriated</u>	<u>Adjustments 1/</u>	<u>Total Program Value</u>	<u>Total Obligations</u>	<u>Total Expenditures</u>
Budget Activity No. 5					
P-1 No. 31-59	\$3,856.7	\$+18.1	\$3,874.8	\$236.6	0

1/ Adjustments result from below threshold reprogramming actions.

(In Thousands of Dollars)

Program Requirement - FY87	\$6,035,700
Program Requirement - FY86	\$4,934,600
Program Requirement - FY85	\$5,325,900
Program Requirement - FY84	\$4,599,100

ACTIVITY: Aircraft Spares and Repair Parts

PURPOSE AND SCOPE: This activity provides funds for investment items used to repair aircraft and aircraft support equipment. Investment items are defined as reparable assemblies that are centrally procured and managed. The account has two categories: initial spares and replenishment spares. The initial spares category funds spares needed to support initial operations of new aircraft, new aircraft modifications and new airborne equipment purchased through the Other Production Charges account (Electronic Counter Measure Pods, for example). The second category, replenishment spares, provides follow-on spares support for all aircraft and aircraft ground support equipment that have transitioned through the initial operations phase. The replenishment spares account finances the bulk of peacetime spares requirements and all wartime spares requirements.

JUSTIFICATION OF FUNDS REQUESTED: The initial spares segment of the account has four parts. Part one, "Initial Weapon System Spares," funds complete spare engines as well as spare parts required to support initial operations of new aircraft. Included in the latter are aircraft spares, engine spare parts and peculiar ground support equipment spares. The second part, "Modification Spares," funds spare parts needed during initial operations of modified airborne systems. Spares to support initial operations of common ground support equipment are included in part three, "Common GSE Spares," while initial operations of equipment financed in the "Other Production Charges" account (such as Electronic Counter Measure Pods) are supported through part four, "Other Production Spares."

The replenishment spares segment of the account has three categories of spares. The first category, Peacetime Operating Stock (POS), supports the peacetime flying hour program. FY86 and FY87 funds support FY88 and FY89 flying hours respectively. The second category, War Readiness Spares Kits (WRSK) and Base Level Self-Sufficiency Spares (BLSS), support initial wartime operations. Funds are required for new FY88 kit authorizations and updates. The first two categories of replenishment spares provide our readiness posture. The last category, Other War Reserve Material (OWRM), provides spares and repair parts to continue wartime operations until the industrial base can meet wartime production requirements. This is the key to sustainability. The funds requested in all three categories reflect savings as a result of implementing the Secretary of Defense's spare parts acquisition reforms and Air Force management initiatives.

The following table compares program funding/requirements by fiscal year:

AIRCRAFT SPARES AND REPAIR PARTS

(In Millions of Dollars)

	FY84	FY85	FY86	FY87
Initial Aircraft Spares	1,295.6	1,439.8	1,148.5	1,132.9
Replenishment Aircraft spares	3,303.5	3,886.1	3,786.1	4,902.8
Total	4,599.1	5,325.9	4,934.6	6,035.7

Initial Aircraft Spares: The initial spares funding requirements are presented in more detail in the following table:

INITIAL AIRCRAFT SPARES

(In Millions of Dollars)

	FY84	FY85	FY86	FY87
Initial Weapon System Spares	1,062.4	1,139.5	798.3	420.3
Initial War Reserve Spares	0	0	0	135.6
Initial Modification Spares	186.3	227.5	212.1	356.3
Initial Common GSE Spares	19.8	41.3	38.3	44.4
Initial Other Production Spares	27.1	31.5	99.8	176.3
Total Initial Spares	1,295.6	1,439.8	1,148.5	1,132.9



The largest segment of the FY86 requirement is for Initial Weapon System Spares. Requested funding of \$798.3 million will support initial operations of 10 in-production aircraft as shown in the following table:

INITIAL AIRCRAFT SPARES REQUIREMENTS

(In Millions of Dollars)

<u>Aircraft</u>	<u>FY85</u>		<u>FY86</u>		<u>FY87</u>	
	<u>Proc</u>	<u>Fund</u>	<u>Proc</u>	<u>Rqmt</u>	<u>Proc</u>	<u>Rqmt</u>
B-1	34	559.7	48	162.2	-	-
F-15	47	111.4	48	85.5	48	119.6
F-16	150	273.3	180	303.6	180	198.0
KC-10	8	55.0	2	72.0	8	-
C-130H	16	12.0	-	-	-	-
MC-130H	2	8.7	1	3.8	2	5.5
C-5B	8	72.3	16	112.5	21	16.0
C-12D	6	3.0	-	-	-	-
C-20	3	5.7	8	16.8	-	-
T-46	10	5.3	33	16.1	90	21.8
HH-60	-	.1	3	6.1	25	42.1
Flt Ins Acft	1	3.0	-	-	1	1.9
TR-1/U-2	4	30.0	8	19.7	2	15.4
Totals		1139.5		798.3		420.3

The second largest driver of initial spares requirements is the aircraft modification program. To support initial operations of over 150 modified systems, new spares inventory valued at \$212.1 million will be required. Four modifications account for 35% of the request--KC-135R re-engineing (\$29.7), B-52 radar upgrade (\$14.7), classified program (\$12.6), and F-111 avionics modernization program (\$17.2). A third segment of the request, "Initial Other Production Spares," has experienced significant growth over prior years. The growth is attributed to two programs--Precision Location Strike System (PLSS) and the Low Altitude Navigation and Targeting Infrared System for Night (LANTIRN). Spare parts inventory costing \$26.8 million will be required for PLSS and \$15.7 million is needed for LANTIRN early-on spares support.

Replenishment Aircraft Spares: The replenishment spares funding requirements are presented in more detail in the following table:

REPLENISHMENT AIRCRAFT SPARES

(In Millions of Dollars)

	<u>FY84</u>	<u>FY85</u>	<u>FY86</u>	<u>FY87</u>
POS	2255.6	2415.6	2395.9	2984.0
WRSK/BLSS	828.4	646.6	1150.5	1419.8
OW&M	219.5	823.9	239.7	499.0
TOTAL REPLEN SPARES	3303.5	3886.1	3786.1	4902.8

Peacetime Operating Stock (POS)

The FY86 replenishment spares program fully supports the Air Force's number one readiness initiative, "peacetime training for combat", with full funding of Peacetime Operating Stocks (\$2395.9M). The FY88 program of 3.7 million flying hours will be supported with FY86 funds. Failure to provide funds will result in inadequate spares levels to support critical combat training. Without these spares, available wartime stocks will be used excessively to support peacetime combat training, degrading readiness. The largest drivers of the POS spares request are to support the B-1B, F-15, F-16 and the F100 engine. As Air Force increases its inventory for these systems, new stocks are required to fill pipelines and increase levels at both base and depot level. In addition to support of new systems, we are also supporting modernization efforts for older weapon systems. The B-52 avionics and engine enhancements, F-4 electronic counter measures, avionics and structural upgrades, and the F-111 avionics modernization program are the significant drivers in this area. A complete breakout of all weapon system requirements and funding follows the discussion on war reserve materiel.

War Readiness Spares Kits/Base Level Self-Sufficiency Spares (WRSK/BLSS): WRSK/BLSS is the prepositioned segment of war reserved materiel maintained at base level with units tasked with wartime missions.

a. War Readiness Spares Kits are air transportable packages of spares that will support specific units tasked to deploy during the first 30 days of a war. The basic configuration of a WRSK is determined by the maintenance concept of the spares, i.e., Remove and Replace (RR) as opposed to Remove, Repair and Replace (RRR). The WRSKs are configured

to include both the RR and RRR maintenance concepts depending on the base level repair available at the deployed site. The using major command and the Air Force Logistics Command determine those essential items to be included in the WRSK. These represent only a small portion of the total number of spares used on a day-to-day basis in peacetime. The quantity of items included in the WRSK are computed using factors such as item wartime failure rates, number of items per aircraft, the wartime flying hour program, base repair time, and item pipeline time.

b. Base Level Self-sufficiency Spares (BLSS) are spares designed to augment peacetime assets to support the initial increased wartime activity for specific units that will fight the war in place. BLSS requirements consider the same factors as those used in the WRSK computation. Those units which are authorized a WRSK are not authorized a BLSS.

The FY86 budget request of \$1,150.5M fully supports WRSK/BLSS requirements for new authorizations and updates. This will continue the improved readiness posture the Air Force has achieved in the last few years. The major drivers are new authorizations for the F-15 and F-16 aircraft and revisions to existing kits that consider modifications, wartime failure rate and flying hour changes.

Other War Reserve Material (OWRM) OWRM is the prestocked segment of war reserve materiel stored in the AFLC depots. These spares are required to sustain forces at wartime levels after peacetime and prepositioned assets are used, and until the production base can be expanded to satisfy wartime consumption. OWRM requirements are also jointly reviewed by the using major command and Air Force Logistics Command to ensure only combat essential items are procured. The resulting OWRM requirements are then reduced by assets available from production, peacetime levels and WRSK/BLSS levels. The OWRM requirement supports the DOD Defense Guidance "days of support". With the FY86 requested funding, the Air Force will meet Defense Guidance goals for tactical forces in FY88 (two year leadtime). Due to limited dollar resources, the B-52 requirement will not be fully satisfied.

The funds received for replenishment spares have a direct relationship to aircraft capability. The 76% increase in wartime tactical sortie generation capability from 1981 to 1984 and 64% increase in projected strategic airlift cargo tons moveable indicate the commitment to improve logistics readiness and sustainability. The FY86 funds request continues to improve our posture and meet Defense Guidance support goals. One of the major reasons for our improved capability is that the Air Force has improved its spares acquisition process. Significant savings have allowed for investment in sustainability in FY84 and FY85. These savings have been considered in the FY86 request in terms of reduced prior year deficits and a 14 percent estimated savings for spares pricing has been applied.

In summary, the FY86 aircraft replenishment spares request will allow the Air Force to fully fund Peacetime Operating Stocks (POS) and War Readiness Spares Kit/Base Level Self-sufficiency Spares - the bedrock of Air Force warfighting capability. Combat proficient air crews, ready to deploy and fight, constitute the Air Force's number one readiness objective. This is completely dependent upon spare parts availability. Partial funding of the most essential OWRM spares will continue the Air Force's efforts to sustain wartime flying hours for tactical forces based on Defense Guidance, as well as maintain mobility forces supported in FY85. These investments in sustainability are possible due to the reforms in spare parts acquisition which produced savings. These initiatives, plus positive funding priorities, are building a ready, sustainable Air Force.

AIR FORCE  
AIRCRAFT REPLENISHMENT SPARES: 1986  
( \$ IN MILLIONS )

WEAPON SYSTEM	PEACETIME		WRSK-BLSS		OWRM	
	TOTAL RQMT	FUNDING	TOTAL RQMT	FUNDING	TOTAL RQMT	FUNDING
A007	12.1	12.1	8.6	8.6	10.3	10.3
A010	23.9	23.9	118.1	118.1	0.0	0.0
A037	0.4	0.4	0.1	0.1	0.0	0.0
B01B	418.9	418.9	0.0	0.0	0.0	0.0
B032	129.4	129.4	103.4	103.4	259.2	20.4
B111	15.5	15.5	0.0	0.0	0.0	0.0
E111	16.2	16.2	4.2	4.2	0.0	0.0
F111	131.0	131.0	25.0	25.0	49.9	49.9
C005	47.9	47.9	35.8	35.8	0.0	0.0
C130	67.7	67.7	80.8	80.8	0.0	0.0
C135	86.0	86.0	10.1	10.1	0.0	0.0
C137	1.2	1.2	0.0	0.0	0.0	0.0
C140	2.5	2.5	0.2	0.2	0.0	0.0
C141	35.4	35.4	10.4	10.4	0.0	0.0
E003	32.2	32.2	37.9	37.9	0.0	0.0
E004	2.2	2.2	0.0	0.0	0.0	0.0
F004	99.6	99.6	15.1	15.1	131.5	131.5
F005	16.5	16.5	0.0	0.0	0.0	0.0
F015	110.6	110.6	197.6	197.6	0.0	0.0
F016	435.2	435.2	356.7	356.7	0.0	0.0
H001	0.7	0.7	0.3	0.3	0.0	0.0
H003	2.0	2.0	0.6	0.6	0.0	0.0
H053	1.7	1.7	2.4	2.4	0.0	0.0
H060	0.1	0.1	5.2	5.2	0.0	0.0
T033	3.3	3.3	0.0	0.0	0.0	0.0
T037	15.2	15.2	0.0	0.0	0.0	0.0
T038	7.0	7.0	0.0	0.0	0.0	0.0
T039	0.3	0.3	0.0	0.0	0.0	0.0
T046	3.8	3.8	0.0	0.0	0.0	0.0
U010	0.4	0.4	0.1	0.1	0.0	0.0
F100	391.3	391.3	3.2	3.2	0.0	0.0
COMN	402.3	402.3	132.3	132.3	27.6	27.6
OTHR	53.4	53.4	2.5	2.5	0.0	0.0
TOTL	2,565.9	2,565.9	1,150.5	1,150.5	478.5	239.7

Total requirement= 4,194.9  
Total funding = 3,956.1  
Total unfunded = 238.8

\*POS includes \$170.0M of replenishment authority

AIR FORCE  
AIRCRAFT REPLENISHMENT SPARES: 1987  
( \$ IN MILLIONS )

WEAPON SYSTEM	PEACETIME		WRSK-BLSS		OWRM	
	TOTAL RQMT	FUNDING	TOTAL RQMT	FUNDING	TOTAL RQMT	FUNDING
A007	13.7	13.7	6.0	6.0	0.8	0.8
A010	45.0	45.0	34.2	34.2	1.0	1.0
A037	0.8	0.8	0.4	0.4	0.1	0.1
B01B	307.9	307.9	241.0	241.0	178.9	178.9
B052	169.0	169.0	68.9	68.9	230.7	172.3
B111	22.6	22.6	0.0	0.0	0.0	0.0
E111	25.1	25.1	74.6	74.6	2.1	2.1
F111	205.6	205.6	162.0	162.0	3.1	3.1
C005	78.4	78.4	47.2	47.2	115.4	115.4
C130	90.6	90.6	32.2	32.2	0.6	0.6
C135	103.4	103.4	11.9	11.9	1.3	1.3
C137	1.6	1.6	0.0	0.0	0.0	0.0
C140	2.7	2.7	0.2	0.2	0.0	0.0
C141	52.7	52.7	15.8	15.8	2.3	2.3
E003	53.7	53.7	13.2	13.2	1.1	1.1
E004	3.1	3.1	0.0	0.0	0.1	0.1
F004	126.8	126.8	60.7	60.7	2.1	2.1
F005	35.2	35.2	0.0	0.0	0.3	0.3
F015	173.4	173.4	195.3	195.3	7.1	7.1
F016	481.2	481.2	434.1	434.1	7.3	7.3
H001	1.1	1.1	1.2	1.2	0.1	0.1
H003	2.1	2.1	6.7	6.7	0.1	0.1
H053	2.5	2.5	10.0	10.0	0.1	0.1
H060	2.0	2.0	3.7	3.7	1.1	1.1
T033	4.4	4.4	0.0	0.0	0.0	0.0
T037	17.8	17.8	0.0	0.0	0.0	0.0
T038	15.1	15.1	0.0	0.0	0.0	0.0
T039	0.8	0.8	0.0	0.0	0.0	0.0
T046	13.9	13.9	0.0	0.0	0.0	0.0
U010	0.7	0.7	0.0	0.0	0.0	0.0
E100	438.4	438.4	0.0	0.0	1.7	1.7
COMN	414.0	414.0	0.0	0.0	0.0	0.0
CTHR	78.8	78.8	0.5	0.5	0.0	0.0
TOTL	2,984.0	2,984.0	1,419.8	1,419.8	577.4	499.0
=====	=====	=====	=====	=====	=====	=====

Total requirement= 4,981.2  
Total funding = 4,902.8  
Total unfunded = 78.4

35

(In Thousands of Dollars)

Program Requirement - FY 87 ...	\$4,491,952
Program Requirement - FY 86 ...	3,490,382
Program Requirement - FY 85 ...	2,688,981
Program Requirement - FY 84 ...	2,221,610

ACTIVITY: Aircraft Support Equipment and Facilities

PART I PURPOSE AND SCOPE

This activity provides for common support equipment required to service and test aircraft and their components; for refurbishment and rehabilitation of industrial machinery, equipment and facilities required in the manufacture of items funded by this appropriation; for those war consumable items required to be on hand for immediate use in the event of war; and for other charges such as electronic countermeasure equipment. The activity also provides for procurement of flight simulation equipment for aircraft that are no longer in production except for the B-1B, and for programs not associated with one specific weapon system.

PART II JUSTIFICATION OF FUNDS REQUESTED

The estimate for this activity is comprised of the following items: (In Millions of Dollars)

<u>LINE ITEM</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Common Ground Equipment	\$414.2	\$627.6	\$631.0	\$968.6
Industrial Responsiveness	129.5	67.5	89.2	99.2
War Consumables	152.5	116.5	86.4	121.9
Other Production Charges	1413.3	1877.4	2683.7	3302.3
NATO A/C	112.1	0	0	0
ACTIVITY TOTALS	\$2221.6	\$2689.0	\$3490.3	\$4492.0

### Common Ground Equipment

This program is for the procurement of organizational, base and initial depot level support equipment, both common and peculiar, for out-of-production aircraft, and for common support equipment for new aircraft entering the inventory. The equipment is used on the flight line, in maintenance shops, and in the depots. The program also provides for the procurement of flight simulators and other training devices for aircraft models that are out of production. It also includes procurement of flight simulators and other training devices for the B-1B. Support equipment includes depot plant equipment, support equipment for modifications, common training equipment, and the following Federal Supply Groups (FSG):

FSG 17 - Aircraft launching, landing, and ground handling equipment (trailers, platforms, slings).

FSG 41/45 - Compressors, air conditioners, and heaters.

FSG 49 - Maintenance and repair shop equipment (test stands, jigs, fixtures, noise suppressors).

FSG 61/66 - Electric wire and power distribution equipment (instrument and laboratory equipment).

Other Federal Supply Groups - Pumps, gauges, nitrogen servicing units, and specialized tools.

The following table shows a comparison, by year, by category, of support equipment:

(In Millions of Dollars)

<u>NOMENCLATURE</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
FSG 17	62.1	55.8	81.6	141.8
FSG 49	196.0	176.1	212.3	369.0
FSG 41/45	66.2	90.1	114.4	198.8
FSG 61/66	53.8	60.1	76.2	132.4
Other FSGs	33.2	47.3	59.9	104.1
Common Training Equipment (Simulators)*	2.9	198.2	86.6	22.5
<b>TOTAL COMMON GROUND EQUIPMENT</b>	<b>414.2</b>	<b>627.6</b>	<b>631.0</b>	<b>968.6</b>

\* FY 85 Common Training Equipment includes Simulators for the B-1, EF-111, C-141, and C-5.



### Industrial Responsiveness

The Industrial Responsiveness program provides for capital type rehabilitation, necessary real property maintenance and improvements, and compliance with environmental and energy requirements for Air Force-owned, contractor-operated industrial facilities. Also included is the Manufacturing Technology program which establishes and validates improved manufacturing methods, processes, and techniques to reduce acquisition and support costs, reduce production lead times, improve product quality, provide domestic sources, increase production yields, and ensure economic producibility of Air Force war fighting equipment. Funding is also provided for Industrial Productivity and Responsiveness Improvement efforts, which include industrial base Technology Modernization (an incentive effort to stimulate private capital investment, and Industrial Preparedness Measures, and for Industrial Base Program Planning.

The following table shows a comparison, by year, of the Industrial Responsiveness program:

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
Expansions	24.8	2.9	.0	3.6
Packing, Crating, & Handling	.1	.1	.1	.3
Capital Type Rehabilitation	21.9	19.4	30.1	56.5
Modernization and Replacement	0	2.0	.0	.4
Manufacturing Technology	8.0	.0	.0	.0
Industrial Base Program Planning	2.6	3.3	4.4	5.1
Environmental Protection/Restoration	10.0	2.3	10.6	.0
Industrial Productivity and Responsiveness Improvement	59.6	29.9	23.8	28.3
Energy Conservation	2.5	7.6	.0	.0
Production Surge	0	0	20.2	5.0
TOTAL Industrial Responsiveness	129.5	67.5	89.2	99.2

The requirements for FY 1986 in each category in the above table are as follows:

Expansions: Required for real property modifications at Air Force Plants. No funding in FY 1986

Packing, Crating, & Handling: Required to prepare idle government-owned equipment for shipment to other locations

Capital Type Rehabilitation: Required for rehabilitation of government-owned contractor-operated industrial production facilities. Included are real property projects at Air Force Plant 3, Tulsa, OK; Air Force Plant 4, Fort Worth, TX; Air Force Plant 6, Marietta, GA; Air Force Plant 42, Palmdale, CA; Air Force Plant 59, Binghamton, NY; Air Force Plant 85, Columbus, OH; and Air Force Plant 19, San Diego, CA.

Modernization & Replacement: Modernizes government-owned industrial production equipment operated at Air Force Plants. No funding in FY 1986.

Manufacturing Technology: Required for the establishment, validation, and demonstration of new manufacturing methods, procedures, and equipment to advance the current manufacturing state-of-the-art. Directly improves the productivity of the U.S. defense industrial base. Government benefits include reduced production and support costs, reduced lead times, improved quality and durability, economic producibility, domestic availability, and improved production yields. Projects are conducted under contract with private industry, with results widely disseminated through the industry. Annual program built with coordination through the Department of Defense Manufacturing Technology Advisory Group. No FY 1985 or subsequent year funding is requested as this program has been transferred to the RDT&E appropriation per Congressional direction.

Industrial Base Program Planning: Analyzes industrial capability to meet Air Force manufacturing requirements for various (including peacetime production) military scenarios and determines programs, deficiencies, bottlenecks, "war-stoppers," and opportunities for improvements. Generates prioritized plans for needed government actions based on Air Force mission requirements. Integrates the sub-elements of the Air Force Industrial Responsiveness program and all Air Force industrial base actions to provide a comprehensive and cohesive approach to improving and assuring the war time capability of the industrial base. FY 1986 efforts will include the annual Production Base Analysis, Mobilization and Surge Planning, Materials Demand and Lead Time Data Base Study, and Fiber Optics Repair Capability Analyses, Electronics sector analysis, robotics applications study, and flexible machining system application study.

Environmental Protection: Required for compliance with federal, state, and local laws and regulations for control of present and correction of past ground, water, air, and other industrial pollution. Include actions at Air Force Plants 3, Tulsa, OK; 6 Marietta, GA; 42, Palmdale, CA; and 4, Fort Worth, TX.

Industrial Productivity and Responsiveness Improvement: Funds Industrial Preparedness Measures and the government portion of industrial base Technology Modernization (Tech Mod) efforts in which the government provides incentives to private industry and industry invests in the modernization of facilities and equipment used for the manufacture of DoD end items resulting in production cost savings shared by the government and industry. Include major Tech Mod initiatives with subcontractors to General Dynamics for F-16 manufacture, General Electric Company and military engine subcontractors, Pratt & Whitney Aircraft Group and military engine subcontractors, Lockheed Georgia company, Fairchild Industries, forging industry contractors, travelling wave tube industry contractors, electronics sector contractors, and Air Force Air Logistics Center contractors.

Production Surge: Fund the purchase of long lead time, semi-finished parts and special test equipment without which production bottlenecks would occur during a rapid, unplanned build-up in time of crisis. FY 1986 funds will purchase equipment and material to surge production of electronic warfare travelling wave tubes, combined effects munitions, and flare and chaff squibs.

1 COMPONENT USAF		FY 19_86		FACILITY PROJECT DATA		2 DATE 18 Jan 85	
3 INSTALLATION AND LOCATION Air Force Plant 3 Tulsa, OK				4 PROJECT TITLE Installation Restoration Program			
5 PROGRAM ELEMENT 78011F		6 CATEGORY CODE 221-221		7 PROJECT NUMBER		8 PROJECT COST (\$000) \$3,000	
9 COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
Installation Restoration Program				LS			\$3,000
10 DESCRIPTION OF PROPOSED CONSTRUCTION							
<p>Description of Requirement:</p> <p>Corrective actions will be taken in response to contamination at AF Plant 3 resulting from historic waste management and disposal actions. This will necessitate the improvement of the plant impoundments.</p> <p>Basis of Need:</p> <p>Project is required to fulfill Air Force responsibilities under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), per delegation to the Department of Defense under Executive Order 12316.</p>							

1 COMPONENT USAF		FY 19_86		FACILITY PROJECT DATA		2 DATE 18 Jan 85	
3 INSTALLATION AND LOCATION Air Force Plant 4 Fort Worth, TX				4 PROJECT TITLE Installation Restoration Program - Phase III			
5 PROGRAM ELEMENT 78011F		6 CATEGORY CODE 221-221		7 PROJECT NUMBER		8 PROJECT COST (\$000) \$4,600.0	
9 COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
Installation Restoration Program - Phase III				LS			\$4,600.0
10 DESCRIPTION OF PROPOSED CONSTRUCTION							
<p>Description of Requirement:</p> <p>Remedial actions will be taken to respond to subsurface contamination at AF Plant 4 resulting from historic waste management and disposal actions dating from 1942. Specific actions will be defined by Installation Restoration Program Phase II and the Phase IV remedial action plan (RAP) and engineering study.</p> <p>Basis of Need:</p> <p>This project is required to fulfill Air Force responsibilities under the Comprehensive Environmental Response Compensation and liability Act (CERCLA), per delegation to the Department of Defense under Executive Order 12316.</p>							

1 COMPONENT USAF		FY 19_86		FACILITY PROJECT DATA		2 DATE 12 Apr 84	
3 INSTALLATION AND LOCATION AFP 4, General Dynamics Fort Worth TX				4 PROJECT TITLE 600 KVA Motor - Generator System for AFEWES			
5 PROGRAM ELEMENT 78011 F		6 CATEGORY CODE 221-221		7 PROJECT NUMBER		8 PROJECT COST (\$000) \$623.0	
9 COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
600 KVS Motor - Generator System for Air Force Electronic Warfare Evaluation Simulator (AFEWES), Bldg 2A				LS			\$623.0
Note:  This is a system specific project which will be funded by AFEWES program funds.							
10 DESCRIPTION OF PROPOS. & CONSTRUCTION Install new primary service and motor-generator sets to provide 60 Hz power conversion with voltage regulation, ride through protection, total line isolation, and transient-free electrical power for computer opera- tions in the expanded Air Force Electronic Warfare Evaluation Simulator located in Bldg 2A.							
BASIS OF NEED:  The Air Force Electronic Warfare Evaluation Simulator has expanded and now occupies space on both the first and second floors of Bldg 2A. Three new shielded severable and portable rooms will house test articles and support equipment. Computer Power Control Centers are required to provide regu- lated, transient-free, 60 Hz power to AFEWES computer systems. Existing power comes from sources shared by loads located outside the AFEWES closed area and is subject to line transients as well as electronic surveillance.							

1 COMPONENT USAF		FY 1986		FACILITY PROJECT DATA		2 DATE 18 Jan 85	
3 INSTALLATION AND LOCATION Air Force Plant 6 Marietta, GA				4 PROJECT TITLE Installation Restoration Program - Phase IV			
5 PROGRAM ELEMENT 78011F		6 CATEGORY CODE 221-221		7 PROJECT NUMBER		8 PROJECT COST (\$000) \$2,000.0	
9 COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
Installation Restoration Program - Phase IV				LS			\$2,000.0
10 DESCRIPTION OF PROPOSED CONSTRUCTION							
<p>Description of Requirement:</p> <p>Remedial actions will be taken to respond to subsurface contamination at AF Plant 6 resulting from historic waste management and disposal actions dating from 1942. Specific actions will be defined by the Installation Restoration Program Phase II and the Phase IV remedial action plan (RAP) and engineering study.</p> <p>Basis of Need:</p> <p>This project is required to fulfill Air Force responsibilities under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), per delegation to the Department of Defense under Executive Order 12315.</p>							

1 COMPONENT USAF		FY 19_86		FACILITY PROJECT DATA		2 DATE 18 Jan 85	
3 INSTALLATION AND LOCATION Air Force Plant 42 (Sites 2 & 5) Palmdale, CA				4 PROJECT TITLE Installation Restoration Program - Phase IV			
5 PROGRAM ELEMENT 78011F		6 CATEGORY CODE 221-221		7 PROJECT NUMBER		8 PROJECT COST (\$000) \$500.0	
9 COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT CCST	COST (\$000)
Installation Restoration Program Phase IV Remedial Action				LS			\$500.0
10 DESCRIPTION OF PROPOSED CONSTRUCTION							
<p>Description of Requirement:</p> <p>Investigate and clean up the contamination at AF Plant 42 resulting from historic waste management and disposal actions at Sites 2 and 5.</p> <p>Basis of Need:</p> <p>This work is part of the Air Force Installation Restoration Program (IRP) to clean up areas contaminated as a result of past activities as identified in the investigation phase of the IRP.</p>							

1 COMPONENT USAF		FY 19 <sup>86</sup>		FACILITY PROJECT DATA		2 DATE 18 Jan 85	
3 INSTALLATION AND LOCATION Air Force Plant 42 (Sites 1, 3, & 4) Palmdale, CA				4 PROJECT TITLE Installation Restoration Program - 3rd Increment			
5 PROGRAM ELEMENT 78011F		6 CATEGORY CODE 221-221		7 PROJECT NUMBER		8 PROJECT COST (\$000) \$500.0	
9 COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
Installation Restoration Program Third Increment				LS			\$500.0
10 DESCRIPTION OF PROPOSED CONSTRUCTION							
<p>Description of Requirement:</p> <p>Third Increment groundwater assessment and Remedial Action Plan (RAP) preparation.</p> <p>Basis of Need:</p> <p>This work is part of the Air Force Installation Restoration Program (IRP) to clean up areas contaminated as a result of past activities as identified in the investigation phase of the IRP.</p>							



#### War Consumables

The funds requested, along with prior funded assets, will provide additional wartime support needed, in the event of hostilities, to sustain operations until such time as production could be expanded to provide the required level of support. Included in this program are auxiliary fuel tanks, missile launchers, pylons, ejector racks, and adaptors which are consumed during wartime and peacetime operations.

The following is a breakout, by fiscal year, of the War Consumables program:

(In Millions of Dollars)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1987</u>
F-4 Aircraft	4.1	-	-	-
F-15 Aircraft	-	-	-	-
F-16 Aircraft	97.8	98.0	69.3	48.6
AGM-65 Launchers	36.5	17.0	10.9	14.7
AGM-88 Launchers	1.9	1.5	2.2	0
AMRAAM Launchers	-	-	-	58.6
OV-10	2.3	-	-	-
HH-53	9.9	-	-	-
	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
Total War Consumables	152.5	116.5	86.4	121.9

#### Other Production Charges

This program provides for items, such as Classified Projects, Alternate Mission Equipment, and Range Improvement, that are not directly related to other procurement lines in this appropriation and cannot be reasonably allocated and charged thereto. It also includes items, such as Electronic Countermeasure (ECM) Pods, Precision Location Strike System, LANTIRN, NAVSTAR GPS, that are used by more than one weapon system and managed as end items themselves. The following table provides a comparison, by fiscal year, of the items in this program:

(In Millions of Dollars)

	FY 1984	FY 1985	FY 1986	FY 1987
Classified Projects	1031.4	1334.8	1630.0	1911.4
ECM Pods	298.2	345.1	325.8	351.5
Pave Tack	6.8	-	-	34.0
Airborne Video Tape Recorder/ Cockpit TV Sensor	8.4	7.2	5.8	6.0
Alternate Mission Equipment	14.6	12.3	15.0	11.4
Range Improvement	14.0	5.3	18.1	9.9
LANTIRN	-	5.0	420.7	756.7
GPU-5/A (30MM Gun Pods)	29.6	-	-	-
Classified Avionics Program	2.3	-	152.9	119.1
Precision Location Strike System	-	74.7	36.0	23.9
NAVSTAR Global Positioning System	-	8.0	29.4	78.4
SAM Communication Replacement	8.0	-	-	-
TOTAL OTHER PRODUCTION CHARGES	1413.3	1877.4	2683.7	3302.3

Justification for the various line items is as follows:

Classified Projects:

Includes the Air Force Tactical Improvement Program and several National defense projects which are classified Special Access.

ECM Pods:

Includes the procurement of new pods, such as the ALQ-131, and update of inventory pods, such as the ALQ-119, to maintain capability to counter the latest Soviet threats. The pods are used on several tactical strike/reconnaissance aircraft.

Airborne Video Tape Recorder (AVTR)/Cockpit TV Sensor (CTVS):

The AVTR records all audio available at the aircrew headset and all video displays on the radar/Electro-Optical display and head-up display (HUD). Aircrews, maintenance crews, and combat and training units use the video tape recordings to analyze mission and training results and for maintenance trouble shooting. The AVTR and CTVS will be common to the entire tactical force. The CTVS will replace the existing gun camera which employs film; the advantage is that no film processing is required, making the data available for use immediately after landing. The CTVS will provide imagery data to the AVTR for recording, including a split-screen presentation for multiple video sources.

Alternate Mission Equipment:

The program procures electronic warfare and airborne photography/reconnaissance equipment to provide countermeasure capabilities against changing enemy electronic defenses or for other unpredicted and urgent operational requirements.

Range Improvement:

This is a joint Air Force/Navy program to procure pods which provide accurate kill data for assessment of tactics and aircrew training at the Air Combat Maneuvering Range. The pod is mounted on a standard launch rail and transmits attitude, airspeed, altitude, angle of attack, and weapons information to ground sites.

Low Altitude Navigation and Targeting Infrared System for Night (LANTIRN):

Includes procurement of new pods to provide a night, under weather capability on the A-10, F-16, and F-15E aircraft to attack ground targets on low level mission in a single pass.

Classified Avionics Program:

This is a Classified Program and Special Access is required for programmatic details.

Precision Location Strike System (PLSS):

PLSS is designed to locate, identify, and guide standoff weapons or attack aircraft on enemy emitters in all-weather conditions throughout the theater of operations. This effort funds the baseline location mission PLSS. The strike mission funding is provided in the appropriate aircraft and weapon lines in accordance with Congressional intent.

NAVSTAR Global Positioning System:

NAVSTAR GPS is a space-based radionavigation system which will provide users their position (accurate to 16 Meters), velocity (.1 meters per sec) and time (.1 microsecond) on a 24 hour per day, all weather, worldwide basis. The GPS satellite segment is in production and will provide an initial operational capability in FY 1987 and its full capability in FY 1988. The DoD policy is for GPS to replace all existing radionavigation systems on military aircraft by the mid 90's. This appropriation funds NAVSTAR GPS user avionics for all USAF aircraft plus the Air Force share of GPS production start-up costs.

COMPARISON OF FY 1984 PROGRAM REQUIREMENTS AS REFLECTED  
IN FY 1985 BUDGET WITH FY 1984 PROGRAM REQUIREMENTS AS  
SHOWN IN FY 1986 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per 1985 Budget	Total Program Requirements Per 1986 Budget	Increase + or Decrease -
Combat Aircraft	\$18,282,888	\$18,888,438	-\$113,578
Airlift Aircraft	1,519,888	1,526,488	+7,400
Trainer Aircraft	5,888	6,875	+275
Other Aircraft	172,488	172,488	8
Modification of In-Service Aircraft	2,635,318	2,783,988	+67,598
Aircraft Spares and Repair Parts	4,689,488	4,599,168	-18,388
Aircraft Support Equipment and Facilities	2,252,888	2,221,618	-31,198
Reimbursable Program	275,828	195,889	-79,939
Total Fiscal Year Program	21,662,738	21,513,884	-149,726

EXPLANATION BY BUDGET ACTIVITY

1. Combat Aircraft - (-\$113.6 million). The net decrease is the result of: approved reprogrammings to Research Development Test and Evaluation, Defense Agencies, (KC-18, -\$2.5 million; F-16, -\$3.8 million), to Research Development Test and Evaluation, Air Force (F-16, -\$8.8 million; F-15, -\$13.6 million), and to Operations and Maintenance, Air Force, (F-16, -\$9.6 million); and reprogramming within the Aircraft Procurement appropriation (-\$77.5 million).
2. Airlift Aircraft - (+\$7.4 million). The increase is a result of reprogrammings within the Aircraft Procurement appropriation.
3. Trainer Aircraft - (+\$3 million). The increase results from reprogrammings within the Aircraft Procurement appropriation.
5. Modification of In-Service Aircraft - (+\$67.6 million). The net increase is the result of: approved reprogrammings to Research Development Test and Evaluation, Air Force (B-52, -\$2.5 million); and reprogrammings within the Aircraft Procurement appropriation (+\$69.1 million).
6. Aircraft Spares and Repair Parts - (-\$18.3 million). The net decrease is the result of: approved reprogramming to Operation and Maintenance, Air Force, (-\$14.5 million); and reprogramming within the Aircraft Procurement appropriation (+\$4.2 million).
7. Aircraft Support Equipment and Facilities - (-\$31.2 million). The net decrease is the result of: approved reprogrammings to Research Development Test and Evaluation, Defense Agencies, (War Consumables, -\$7.8 million), to Research Development Test and Evaluation, Air Force, (Other Production Charges, -\$7.1 million; War Consumables, -\$18.4 million), to Operations and Maintenance, Air Force, (War Consumables, -\$6.9 million); and reprogrammings within the Aircraft Procurement appropriation (+\$1.8 million).
8. Reimbursable Program (-\$79.9 million). The decrease is a result of receipt of fewer customer orders than anticipated.

COMPARISON OF FY 1984 FINANCING AS REFLECTED  
IN FY 1985 BUDGET WITH FY 1984 FINANCING AS  
SHOWN IN FY 1986 BUDGET

	(In Thousands of Dollars)		
	Financing Per FY 1985 Budget	Financing Per FY 1986 Budget	Increase(+) or Decrease(-)
Program Requirements .....	21,662,730	21,513,004	-149,726
Program requirements (Service Account).....	(21,387,710)	(21,317,915)	(-69,795)
Program requirements (Reimbursable).....	(275,620)	(195,089)	(-79,931)
Less:			
Anticipated Reimbursements.....	275,020	195,089	-79,931
Reappropriation.....	323,100	323,100	0
Add:			
Transferred to other accounts .....	15,500	69,795	+54,295
Unobligated Balance to finance subsequent year budget plans.....		15,500	+15,500
Appropriation.....	21,060,110	21,000,110	0

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1984 program has decreased \$149,726 thousand since submission of the FY 1985 Budget. Adjustments by category of financing are explained below.

1. Anticipated Reimbursements. The decrease of \$79,931 thousand is due to receipt of fewer customer orders than anticipated.
2. Transfer to Other Accounts. The decrease of \$54,295 thousand is due to approved reprogrammings.
3. Unobligated Balance to Finance Subsequent Year Budget Plans. The decrease of \$15,500 thousand is due to an anticipated reprogramming from the Aircraft Procurement program.

COMPARISON OF FY 1985 PROGRAM REQUIREMENTS AS REFLECTED  
IN FY 1985 BUDGET WITH FY 1985 PROGRAM REQUIREMENTS AS  
SEEN IN FY 1986 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per 1985 Budget	Total Program Requirements Per 1986 Budget	Increase + or Decrease -
Combat Aircraft	\$13,669,800	\$12,710,600	-\$959,200
Airlift Aircraft	2,154,500	1,932,000	-222,500
Trainer Aircraft	126,700	126,000	-700
Other Aircraft	249,500	219,800	-29,700
Modification of In-Service Aircraft	3,382,100	3,074,785	-307,315
Aircraft Spares and Repair Parts	5,990,200	5,325,900	-664,300
Aircraft Support Equipment and Facilities	3,193,700	2,688,981	-414,719
Reimbursable Program	279,020	279,020	0
Total Fiscal Year Program	\$28,955,520	\$26,357,086	-2,598,434

EXPLANATION BY BUDGET ACTIVITY

1. Combat Aircraft - (-\$959.2 million). The decrease is a result of Congressional adjustments to the FY 1985 request (B-1, -\$31.6 million; F-15, -\$98.1 million; F-16, -\$714.8 million; Tactical Fighter Derivative Aircraft, -\$26.6 million; KC-10, -\$82.1 million; MC-130H, -\$6.0 million).
2. Airlift Aircraft - (-\$222.5 million). The net decrease is the result of Congressional adjustments to the FY 1985 request (C-5B, -\$417.3 million; C-130H, +\$288.0 million; C-12, +\$12.9 million; C-20A, -\$3.2 million); and an anticipated reprogramming (C-5, -\$182.0 million).
3. Trainer Aircraft - (-\$.7 million). The decrease is the result of a Congressional reduction to the FY 1985 request for T-46A.
4. Other Aircraft - (-\$29.7 million). The net decrease is the result of Congressional adjustments to the FY 1985 request (HH-60, -\$16.5 million; TR-1/U-2, -\$41.7 million; C-20A, +\$20.0 million) and an anticipated reprogramming (+\$8.5 million).

5. Modification of In-Service Aircraft - (-\$387.3 million). The net decrease is a result of Congressional adjustments on the FY 1985 request for numerous modification programs (-\$325.4 million) and an anticipated reprogramming (+\$18.1 million).

6. Aircraft Spares and Repair Parts - (-\$664.3 million). The net decrease is the result of Congressional adjustments to the FY 1985 request (-\$628.1 million), and an anticipated reprogramming (-\$36.2 million).

7. Aircraft Support Equipment and Facilities - (-\$414.7 million). The net decrease is a result of Congressional adjustments to the FY 1985 request (Common Ground Equipment, -\$74.4 million; Industrial Responsiveness, -\$11.8 million; War Consumables, -\$118.9 million; Other Production Charges, -\$211.8 million) and an anticipated reprogramming (+\$1.4 million).



COMPARISON OF FY 1985 FINANCING AS REFLECTED  
IN FY 1985 BUDGET WITH FY 1985 FINANCING AS  
SHOWN IN FY 1986 BUDGET

	(In Thousands of Dollars)		
	Financing Per FY 1985 Budget	Financing Per FY 1986 Budget	Increase(+) or Decrease(-)
Program Requirements.....	28,955,520	26,357,086	-2,598,434
Program requirements (Service Account).....	(28,676,500)	(26,278,066)	(-2,598,434)
Program requirements (Reimbursable).....	(279,020)	(279,320)	(-)
Less:			
Anticipated Reimbursements.....	279,020	279,020	-
Add:			
Transferred to other accounts .....	-	110,200	+110,200
Appropriation.....	28,676,500	26,188,266	-2,488,234

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1985 program has decreased \$2,598,434 thousand since submission of the FY 1985 budget. Adjustments by category of financing are explained below:

1. Transferred to Other Accounts. The decrease of \$118,294 thousand is due to an anticipated reprogramming from the Aircraft procurement appropriation.
2. Appropriation. The decrease of \$2,488,234 thousand is the result of Congressional adjustments to the FY 1985 Budget.

FLIGHT SIMULATOR & OTHER TRAINING EQUIPMENT  
(Dollars in Millions)

4 February 1985  
FY 86 President's Budget

APPROPRIATION: Aircraft Procurement, Air Force

Weapon System	DyL:	P-1 Line Item	FY 84 & Prior		FY 85		FY 86		FY 87		FY 88	
			Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
B-1B	WST & MT	61			2/0	99.9	2/2	70.6		1.6		1.7
	CPT	61			6	29.0						
	Spares	60				10.4		8.6				
	TOTAL				2/0/6	139.3	2/2	79.2		1.6		1.7
C-5	ATS(WST/CPT)	14	5/4	99.5		4.2		22.6				
	ARPTT	14			3	14.5						
	Spares	60		.1		1.1						
	TOTAL		6/4	99.6	3	19.8		22.6				
C-141	ARPTT	61			3	18.2						
	Spares	60				1.1						
	TOTAL				3	19.3						
EF-111A	OFT	61		1.0	1	23.4						
	Spares	60		2.0								
	TOTAL			3.0	1	23.4						
F-15C/D	OFT	4	13	123.5			1	17.0				
F-15E	WST	4					1	32.0	1	35.1	1	36.5
	CPT	4					2	.8	3	5.8*	2	1.0
	M.F.	4		83.2		66.4		67.6		23.7		25.1
	TOTAL		13	206.7		66.4	1 1/2	117.4	1/3	64.6	1/2	62.6
F-16C/D	OFT	5	15**	284.9	6**	126.6	3**	76.2	7**	223.0	5**	179.5
	PTT	6		9.4		1.6		2.1		3.5		3.5
	MTE	5		190.0		39.3		117.3		41.8		56.8
	TOTAL		15	484.3	6	167.5	3	195.6	7	268.3	5	239.8
AC-119A	MS	8	3	53.4								
	CPT/BOPTT	8	3/2	12.1	0/1	2.7						
	TOTAL		3/3/2	65.5	0/1	2.7						
C-130	WST	61			2	13.2	2	13.2	1	7.3		
					2	13.2	2	13.6	1	7.3		

\*Includes computer based instruction

\*\*Quantities for F-16 simulators include the basic OFT only; the OFT funding includes the basic OFT plus Digital Radar Land Mass Simulation (DRLMS), the Electronic Warfare Training Device (EWTD), and the Lantern Simulation Capability (FY 84 also included 14 Avionics Familiarization Trainers (AFT)).

Exhibit P-43 (page 1 of 4)

FLIGHT SIMULATOR & OTHER TRAINING EQUIPMENT  
(Dollars in Millions)

4 February 1985  
FY 86 President's Budget

APPROPRIATION: Aircraft Procurement, Air Force

Weapon System	Type	P-1 Line Item	FY 84 & Prior		FY 85		FY 86		FY 87		FY 88	
			Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
T-46A	OFT	21							3	27.4	2	12.9
	MTE				2.6		7.4			5.2		5.3
	TOTAL				2.6		7.4		3	32.6	2	18.2
A-10	MTE	61					2.4					
	TOTAL						2.4					
HH-60A	PTT	24							6	.8	3	.4
	Total								6	.8	3	.4
F-4	PTT	61							5	20.8		
	Total								5	20.8		
C-17	WST	16										
	CPT	16										
	ARPTT	16										
	COURSEWARE	16										
	M.E	16										
	Total											6.5
												6.5
TOTAL				855.1		452.2		438.2		396.0		329.2

FLIGHT SIMULATOR & OTHER TRAINING EQUIPMENT  
(Dollars in Millions)

4 February 1985  
FY 86 President's Budget

APPROPRIATION: Aircraft Procurement, Air Force

Weapon System	Type	P-1 Line Item	FY 80		FY 90		Cost to Complete		Total Cost	
			Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
B-1B	WST & MT	61		5.3		5.6			4/2	184.7
	CPT	61							6	29.0
	Spares	60								19.0
	TOTAL			5.3		5.6			4/2/6	232.7
C-5	ATS(WST/CPT)	14							6/4	126.3
	ARPTT	14							3	14.5
	Spares	60								1.2
	TOTAL								6/4/3	142.0
C-141	ARPTT	61							3	18.2
	Spares	60								1.1
	TOTAL								3	19.3
EF-111A	OFT	61							1	24.4
	Spares	60								2.0
	TOTAL								1	26.4
F-15C/D	OFT	4							14	140.5
F-15E	WST	4	2	76.0	1	41.5			6	221.1
	CPT	4	1	1.1	1	1.1			9	9.8
	MTE	4		41.8		32.7	2.9			343.4
	TOTAL		2/1	118.9	1/1	75.3	2.9		14/6/9	714.8
F-16C/D	OFT	6		142.2		101.4	146.1		36	1281.9
	PTT	6		2.7		2.2	3.5			28.5
	MTE	6		91.4		86.0	160.2			782.8
	TOTAL			236.3		189.6	309.8		36	2093.2
KC-10A	MS	8							3	53.4
	CPT/BOPPT	8							3/3	4.8
	TOTAL								3/3/3	68.2
C-130	WST	61							5	34.1
									5	34.1

FLIGHT SIMULATOR & OTHER TRAINING EQUIPMENT  
(Dollars in Millions)

4 February 1985  
FY 86 President's Budget

APPROPRIATION: Aircraft Procurement, Air Force

Weapon System	Type	P-1 Line Item	FY 89		FY 90		Cost to Complete		Total Cost	
			Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
T-46A	OFT	21	2	17.0	2	17.6	1	9.1	10	84.0
	MTE			.9		1.1		1.4		23.9
	TOTAL		2	17.9	2	18.7	1	10.5	10	107.9
A-10	MTE	61								2.4
	TOTAL									2.4
HH-60A	PTT	24							9	1.2
	TOTAL									1.2
F-4	PTT	61							5	20.8
	TOTAL								5	20.8
C-17	WST	16	1	27.1			4	84.5	5	111.6
	CPT	16	1	3.8			4	11.8	5	15.6
	ARPTT	16			1	9.4	4	39.6	5	49.0
	COURSEWARE	16				11.9				11.9
	MTE	16		8.4		16.7		179.6		211.2
	TOTAL		1/1	10.6	1	38.0	4/4/4	315.5	5/5/5	399.3
TOTAL				417.7		327.0		638.7		3862.3

LEGEND: AGPTT Aerial Gunnery Part Task Trainer  
 ARPTT Aerial Refueling Part Task Trainer  
 BOPTT Boom Operator Part Task Trainer  
 CPT Cockpit Procedures Trainer  
 MS Mission Simulator  
 MTE Maintenance Training Equipment  
 OFT Operational Flight Trainer  
 PTT Part Task Trainer  
 WST Weapon System Trainer  
 ATS Aircrew Training System

Exhibit P-43 (Page 4 of 4)

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO MILSTAR AFSATCOM TERM UPGRADE/DUAL MODEM

MODELS OF AIRCRAFT AFFECTED: B-13

DESCRIPTION/JUSTIFICATION MODIFICATION PROVIDES PRINTED CIRCUIT BOARD REPLACEMENTS FOR THE AFSATCOM TERMINAL DUAL MODEM. MODIFICATION REQUIRED TO TRANSITION THESE TERMINALS TO MILSTAR, RESOLVE A POTENTIAL FREQUENCY INTERFERENCE PROBLEM, CORRECT FOTSE DEFICIENCIES AND TO PROVIDE PROPER FREQUENCY-HOPPING ALGORITHM FOR COMPATIBILITY WITH CHANGES BEING MAKE TO THE AFSATCOM SATELLITE TRANSPONDER ON THE SATELLITE DATA SYSTEMS (SDS) SPACECRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BA\$IS FOR COST					100	5.1					100	5.1
ESTIMATE:												
KITS					100	4.3					100	4.3
DATA						.3						.3
SUPPORT-EQUIP						.5						.5
TOTAL					100	5.1					100	5.1

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 11 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ACM INTEGRATION

MODELS OF AIRCRAFT AFFECTED: B-13

DESCRIPTION/JUSTIFICATION INTEGRATES ADVANCED CRUISE MISSILE INTO B-13 AIRCRAFT.  
SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							8	38.5			8	38.5
ESTIMATE:												
KITS							8	22.0			8	22.0
DATA								2.5				2.5
SUPPORT-EQUIP								10.0				10.0
PYLONS								4.0				4.0
TOTAL							8	38.5			8	38.5

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 24 MONTHS



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO VLF/LF MINIATURE RECEIVE TERMINALS (MRT)

MODELS OF AIRCRAFT AFFECTED: B-13

DESCRIPTION/JUSTIFICATION MRT WILL PROVIDE SAC WITH STRATEGIC CONNECTIVITY THROUGH THE USE OF VERY LOW FREQUENCY/LOW FREQUENCY (VLF/LF) RADIO. THE MRT WILL PROVIDE A RECEIVE ONLY CAPABILITY TO ENSURE THE RECEPTION OF EMERGENCY ACTION MESSAGES.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:							46	20.1	23	10.1	69	30.2
KITS							46	20.1	23	10.1	69	30.2
TOTAL							46	20.1	23	10.1	69	30.2

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 24 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION; AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ALCM-CARRIER INTERNAL (CSRL), MA-3142

MODELS OF AIRCRAFT AFFECTED: B-52H

DESCRIPTION/JUSTIFICATION (U) MODIFIES 96 B-52H AIRCRAFT WITH PROVISIONS FOR  
INTERNAL AIR LAUNCHED CRUISE MISSILE (ALCM) CARRIAGE. PROVIDES THE COMMON  
STRATEGIC ROTARY LAUNCHER (CSRL) FOR INTERNAL CARRIAGE OF ALCM, SRM,  
AND GRAVITY WEAPONS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
		10.0			5	75.0	23	174.4	58	403.5	96	662.9
BASIS FOR COST												
ESTIMATE:												
NONRECURRING						12.5		8.1		11.2		31.8
KITS					5	18.5	23	73.9	58	184.5	96	276.9
DATA						8.5		2.4		4.0		15.0
SUPPORT-EQUIP						4.6		10.0		24.6		39.2
SIM/TRAINER						2.7		9.9		2.7		15.3
AISF MOD						2.5						2.5
TOOLING		10.0				7.6						17.6
CSR LAUNCHER					(6)	18.0	(27)	70.1		176.5		264.6
TOTAL		10.0			5	75.0	23	174.4	58	403.5	96	662.9

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 23 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ALQ-172 ECM, M4-3145

MODELS OF AIRCRAFT AFFECTED: B-52H

DESCRIPTION/JUSTIFICATION IMPROVES CAPABILITY TO PROVIDE DEFENSE AGAINST EXISTING  
AND PROJECTED AIRBORNE INTERCEPTOR THREATS. PROVIDES ADVANCED ELECTRONIC COUNTERMEASURES (ECM)  
TECHNIQUES, SOFTWARE REPROGRAMMABILITY, AND INCREASED POWER.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST	2	61.8	7	96.3	23	113.0	23	109.6	41	184.4	96	565.1
ESTIMATE:												
NONRECURRING	1	32.5		11.0							1	43.5
KITS	1	10.2	7	37.5	23	103.5	23	106.9	41	184.4	95	442.5
DATA		5.8		12.9								18.7
SIM/TRAINER			(9)	4.3								4.3
SUPPORT EQUIP		9.8		30.6		9.5		2.7				52.6
TOOLING		3.5										3.5
TOTAL	2	61.8	7	96.3	23	113.0	23	109.6	41	184.4	96	565.1

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO NAVSTAR GPS RETROFIT, MN-3150

MODELS OF AIRCRAFT AFFECTED: B-52G/H

DESCRIPTION/JUSTIFICATION THE NAVSTAR GLOBAL POSITIONING SYSTEM (GPS) PROVIDES WORLDWIDE THREE-DIMENSIONAL POSITIONING/NAVIGATION FOR MILITARY AIRCRAFT. SYSTEM IS COMPOSED OF THREE SEGMENTS: USER EQUIPMENT, SATELLITES AND A CONTROL NETWORK. SATELLITES BROADCAST HIGH-ACCURACY DATA SIGNALS WHICH ARE RECEIVED BY USER EQUIPMENT TO COMPUTE PLATFORM POSITION AND VELOCITY AND PROVIDE STEERING VECTORS TO TARGET LOCATIONS. CONTROL SEGMENT DAILY UPDATES THE NAVIGATION MESSAGES BROADCAST FROM THE SATELLITES.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					16	8.1	34	6.5	115	24.1	165	38.7
BASIS FOR COST												
ESTIMATE:												
NONRECURRING					1	3.2			1	1.2	2	4.4
KITS					15	2.9	34	6.2	114	21.5	163	30.6
DATA						1.2						1.2
SUPPORT-EQUIP						.6	.3			1.2		2.1
SIM/TRAINER						.2				.2		.4
TOTAL					16	8.1	34	6.5	115	24.1	165	38.7

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 20 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO E-52G PAVE MINT, MN-3152

MODELS OF AIRCRAFT AFFECTED: B-52G

DESCRIPTION/JUSTIFICATION PROVIDES AN UPDATE TO THE ALQ-117 ELECTRONIC COUNTERMEASURES SET FOR THE B-52G AIRCRAFT TO COUNTER AIRBORNE AND GROUND-BASED FIRE CONTROL AND MISSILE RADARS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
		5.0	22	90.0	17	62.8	30	115.0	27	97.1	96	370.9
BASIS FOR COST												
ESTIMATE:												
NONRECURRING		1.4										1.4
KITS			22	73.4	17	59.8	30	106.0	27	96.0	96	335.2
DATA		2.3								1.1		3.4
SUPPORT-EQUIP		2.3		14.6		3.0		9.0				28.9
SIM/TRAINER				2.0								2.0
TOTAL		5.0	22	90.0	17	62.8	30	115.0	27	97.1	96	370.9

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 24 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO B-52H AEW INTEGRATION

MODELS OF AIRCRAFT AFFECTED: B-52H

DESCRIPTION/JUSTIFICATION INTEGRATES ADVANCED CRUISE MISSILE INTO 95 B-52H AIRCRAFT.  
SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					11	45.6	24	42.3	60	104.3	95	192.2
BASIS FOR COST												
ESTIMATE:												
KITS					11	10.0	24	23.0	60	60.0	95	93.0
DATA						4.6		3.3		2.2		10.1
SUPPORT-EQUIP						15.0		4.0				19.0
PYLONS					(22)	16.0	(48)	17.0		42.1		70.1
TOTAL					11	45.6	24	42.3	60	104.3	95	192.2

METHOD OF IMPLEMENTATION INSTALLATION -- REPT  
LEAD TIME -- 24 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO INTEGRATED CONV STORES MANAGEMENT SYSTEM

MODELS OF AIRCRAFT AFFECTED: 3-520

DESCRIPTION/JUSTIFICATION THIS PROGRAM PROVIDES AN INTEGRATED CONVENTIONAL STORES MANAGEMENT SYSTEM USING MILITARY STANDARD 1763 SPECIFICATIONS FOR THE NON ALON 4-526S. THE SYSTEM IS INTEGRATED INTO THE OFFENSIVE AVIONICS SYSTEM SOFTWARE AND WILL ENABLE THE B-526 TO CAPRY, PROGRAM, AND LAUNCH NEW CONVENTIONAL WEAPONS THAT ARE BUILT TO MILITARY STANDARD 1760.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING					3	11.0	35	43.8	51	38.6	69	93.4
KITS						5.0						5.0
DATA					3	4.0	75	42.0	31	38.6	69	94.6
SUPPORT-EQUIP						1.0		1.0				2.0
MOD OF SPARES						1.0						1.0
TOTAL					3	1.0	35	43.8	51	38.6	69	93.4

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 24 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO MILSTAR AFSATCOM TERM UPGRADE/DUAL MODEM

MODELS OF AIRCRAFT AFFECTED: B-52G/H

DESCRIPTION/JUSTIFICATION PROVIDES PRINTED CIRCUIT BOARD REPLACEMENTS FOR THE AFSATCOM TERMINAL DUAL MODEM. MODIFICATION REQUIRED TO TRANSITION THESE TERMINALS TO MILSTAR, RESOLVE A POTENTIAL FREQUENCY INTERFERENCE PROBLEM, CORRECT FOT&E DEFICIENCIES AND TO PROVIDE PROPER FREQUENCY-HOPPING ALGORITHM FOR COMPATIBILITY WITH CHANGES BEING MADE TO THE AFSATCOM TRANSMITTER ON THE SATELLITE DATA SYSTEMS (SDS) SPACECRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJY YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					263	14.9					263	14.9
BASIS FOR COST												
ESTIMATE:												
NONRECURRING						.5						.5
KITS					263	12.6					263	12.6
DATA						.7						.7
SUPPORT-EQUIP						1.1						1.1
TOTAL					263	14.9					263	14.9

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 11 MONTHS



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO SYNTHETIC APERTURE RADAR (SAR)

MODELS OF AIRCRAFT AFFECTED: B-52G

DESCRIPTION/JUSTIFICATION SAR IS A HIGH RESOLUTION RADAR-A MULTIMODE, LONG-RANGE RADAR THAT EMPLOYS SYNTHETIC/INVERSE SYNTHETIC APERTURE RADAR TECHNOLOGY. IT WILL ENABLE THE NON-A/C B-52G AIRCRAFT TO DETECT, TRACK, IDENTIFY, AND ENGAGE MOBILE, FIXED, AND MARITIME TARGETS USING CONVENTIONAL WEAPONS ANYWHERE IN THE WORLD WHILE MINIMIZING AIRCRAFT EXPOSURE TO LETHAL DEFENSES.

SCOPE OF PROGRAM

	PRIOR QTY COST	FY-85 QTY COST	FY-86 QTY COST	FY-87 QTY COST	OUTYEAR QTY COST	TOTAL QTY COST
				4 118.0	26 331.0	30 449.0
BASIS FOR COST						
ESTIMATE:						
NONRECURRING				51.0	87.0	138.0
KITS				4 50.0	26 183.0	30 233.0
DATA				3.0	12.0	15.0
SUPPORT-EQUIP				1.0		1.0
SIM/TRAINER				3.0	12.0	15.0
TOOLING				10.0	37.0	47.0
TOTAL				4 118.0	26 331.0	30 449.0

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ENVIRONMENTAL CONTROL SYSTEM, MN-14028

MODELS OF AIRCRAFT AFFECTED: B-52B/H

DESCRIPTION/JUSTIFICATION UPGRADES THE EXISTING UNRELIABLE AND COSTLY ENVIRONMENTAL CONTROL SYSTEM WITH A NEW TECHNOLOGY, HIGHLY RELIABLE SYSTEM. THE PRESENT SYSTEM IS VERY TROUBLESOME AND WILL BECOME UNSUPPORTABLE IN THE NEAR-TERM. THIS MOD WILL PROVIDE UPGRADED BLEED AIR TEMPERATURE REGULATION, ZONE TEMPERATURE CONTROL/CABIN AIR DISTRIBUTION. CONSIST OF PNEUMATIC SYSTEMS PRECOOLER CONTROL SYSTEM, UPDATE AND NEW ENVIRONMENTAL CONTROL UNIT (ECU). CONFIGURATION UPDATE TO ALLOW DELETION OF ODS/FROGS ON THE B-52H ALSO CAPABLE AIRCRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	142	117.6	62	29.5	59	29.4					263	176.5
BASIS FOR COST ESTIMATE:												
NONRECURRING		23.7										23.7
KITS	142	87.5	62	29.3	59	28.5					263	145.3
DATA		2.6		.2		.9						3.7
TRAINER		1.0										1.0
SUPPORT EQUIP		2.8										2.8
TOTAL	142	117.6	62	29.5	59	29.4					263	176.5

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 24 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO RADAR UPGRADE, MN-114088

MODELS OF AIRCRAFT AFFECTED: B-52 S/H

DESCRIPTION/JUSTIFICATION WILL UPGRADE EXISTING RADAR BY REPLACING OUTDATED, UNRELIABLE ITEMS WITH SOLID-STATE COMPONENTS. AN INTERIM MODIFICATION AND SPECIAL SUPPORT ACTIONS ARE REQUIRED TO ASSURE RADAR SUPPORT BEYOND FY 85. MODIFICATION IS DRIVEN BY R&M/SUPPORT REQUIREMENTS; SOME ACCURACY AND RESOLUTION IMPROVEMENTS WILL ACCRUE DUE TO UPDATED COMPONENTS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	11	95.5	62	98.2	63	82.7	62	69.4	65	77.0	263	422.8
NONRECURRING		30.6										30.6
KITS	11	21.3	62	48.2	63	68.2	62	67.0	55	70.8	263	295.5
DATA		13.7		5.5		2.4		1.7		6.2		29.5
SUPPORT EQUIP		18.4		13.7		2.0						34.1
TOOLING		9.7		2.0		1.3		.7				13.7
SIMULATORS				3.5								3.5
MOD OF SPARES		1.8		5.3		8.8						15.9
TOTAL	11	95.5	62	98.2	63	82.7	62	69.4	65	77.0	263	422.8

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATIONS: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO AUTOMATIC FLIGHT CONTROL UPDATE, MN-18420A

MODELS OF AIRCRAFT AFFECTED: S-526/H

DESCRIPTION/JUSTIFICATION PRESENT AUTOPILOT IS BECOMING UNSUPPORTABLE AND IS SUBJECT TO UNSCHEDULED PITCH-UP/DOWN IN LOW-LEVEL AND AERIAL REFUELING MODES, ROLL WALLOW, AND YAW OSCILLATIONS. MODIFICATION REPLACES ALTITUDE AND PARAMETER CONTROLS, MAIN AMPLIFIER, SERVO CONTROL AND STEERING COUPLER WITH A SOLID STATE LRU. MODIFICATION WILL IMPROVE CURRENT 18 HOUR MEAN TIME BETWEEN MAINTENANCE ACTIONS TO 100 HOURS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					65	20.0	160	30.8	38	5.8	263	56.6
BASIS FOR COST												
ESTIMATE:												
NONRECURRING						2.0						2.0
KITS					65	10.0	160	24.5	38	5.8	263	40.3
DATA						4.0						4.0
SUPPORT-EQUIP						4.0		2.9				6.9
SIM/TRAINER								3.4				3.4
TOTAL					65	20.0	160	30.8	38	5.8	263	56.6

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO VLF/LF RECEIVERS

MODELS OF AIRCRAFT AFFECTED: B-52 H

DESCRIPTION/JUSTIFICATION VERY LOW FREQUENCY/LOW FREQUENCY MINIATURIZED RECEIVE TERMINALS (MRT)  
WILL BE PROVIDED FOR THE B-1, B-52, AND FB-111. ADDS A DIRECT VLF/LF RECEPTION CAPABILITY TO  
THE BOMBER FORCE. THE MRT WILL BE SECURE AND WILL INCORPORATE SIGNAL COMBINING AND MEECH  
MESSAGE PROCESSING MODE (MMPM).

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							18	49.0	78	143.1	96	192.1
ESTIMATE:												
KITS							18	49.0	78	143.1	96	192.1
TOTAL							18	49.0	78	143.1	96	192.1

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 24 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ELECTRONIC COUNTER MEASURES UPGRADE

MODELS OF AIRCRAFT AFFECTED: FB-111

DESCRIPTION/JUSTIFICATION THIS MODIFICATION UPGRADES AND AUGMENTS THE CURRENT FB-111 SYSTEM TO COUNTER A NEW GENERATION OF ELECTRONIC THREATS. CHANGES WILL PROVIDE INCREASED THREAT RECOGNITION AND APPROPRIATE COUNTER MEASURES TO COMBAT THE NEW/MODIFIED THREATS.

SCOPE OF PROGRAM	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:					2	5.0	29	8.5	24	7.1	55	20.6
NONRECURRING						.5						.5
KITS					2	.6	29	7.5	24	7.1	55	15.2
DATA						.5		1.0				1.5
SUPPORT-EQUIP						3.4						3.4
TOTAL					2	5.0	29	8.5	24	7.1	55	20.6

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO FB-111 COUNTERMEASURES DISPENSER

MODELS OF AIRCRAFT AFFECTED: FB-111A

DESCRIPTION/JUSTIFICATION THE A-E-40 CHAFF/FLARE DISPENSER WILL BE INSTALLED TO COUNTER THE CURRENT  
SURFACE TO AIR AND AIR TO AIR MISSILE THREAT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					30	4.5	29	2.5			59	7.0
ESTIMATE:												
NONRECURRING												
KITS					30	2.5	29	2.5			59	5.0
DATA												
SUPPORT-EQUIP						1.0						1.0
TOTAL					30	4.5	29	2.5			59	7.0

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO MILSTAR UHF TRANSITION

MODELS OF AIRCRAFT AFFECTED: FB-111

DESCRIPTION/JUSTIFICATION MODIFICATION PROVIDES PRINTED CIRCUIT BOARDS FOR THE A ATCOM TERMINAL DUAL MODEM. MODIFICATION IS REQUIRED TO TRANSITION THESE TERMINALS TO MILSTAR, RESOLVE A POTENTIAL FREQUENCY INTERFERENCE PROBLEM, AND PROVIDE PROPER FREQUENCY-HOPPING ALGORITHM FOR COMPATABILITY WITH THE SATELLITE DATA SYSTEM (SDS) SPACECRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					59	3.7					59	3.7
ESTIMATE:												
NONRECURRING					1	.5					1	.5
KITS					58	2.7					58	2.7
DATA						.5						.5
TOTAL					59	3.7					59	3.7

METHOD OF IMPLEMENTATION INST LATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO A1A-9L CAPABILITY

MODELS OF AIRCRAFT AFFECTED, A-7D/K

DESCRIPTION/JUSTIFICATION THE A-7 IS BEING PROVIDED A SELF-DEFENSE AIR-TO-AIR CAPABILITY USING THE AIM-9L MISSILE. THE MODIFICATION WILL INCLUDE ONLY A LIMITED POINT AND SHOOT CAPABILITY.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					363	3.3					363	3.3
BASIS FOR COST												
ESTIMATE:												
NONRECURRING					1	.2					1	.2
KITS					362	1.2					362	1.2
DATA						.1						.1
SUPPORT-EQUIP						1.8						1.8
TOTAL					363	3.3					363	3.3

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO A-7 23MM AMMO LOADER

MODELS OF AIRCRAFT AFFECTED, A-7D/K

DESCRIPTION/JUSTIFICATION CONVERTS AIRCRAFT TO ACCEPT LINKLESS 23MM AMMUNITION LOADING AND PROVIDES NEEDED ADAPTERS, AMMUNITION LOADERS AND REPLENISHERS FOR A COMPLETE SYSTEM TO REPLACE THE EXISTING WORN-OUT LINKED LOADING SYSTEM. SUPPORT EQUIPMENT IS COMMON TO THE F-16 AND PROGRAMMED FOR THE F-15 AND F-4E.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							72	3.4	283	12.4	355	15.8
ESTIMATE:												
KITS							72	3.3	283	12.4	355	15.7
DATA								.1				.1
TOTAL							72	3.4	283	12.4	355	15.8

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO SLAVED AIM-9L CAPABILITY

MODELS OF AIRCRAFT AFFECTED: A-7

DESCRIPTION/JUSTIFICATION THIS MOD SLAVES THE AIM-9L CAPABILITY TO A HELMET-MOUNTED SIGHT  
ALLOWING FOR IMPROVED SELF DEFENSE THROUGH OFF-BORESIGHT TARGETING CAPABILITY.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							72	4.0	291	16.4	363	20.4
ESTIMATE;												
NONRECURRING												
KITS							72	3.8	291	16.4	363	20.2
DATA								.1				.1
TOTAL							72	4.0	291	16.4	363	20.4

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATIONS: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO AIM-9L CAPABILITY

MODELS OF AIRCRAFT AFFECTED: A-10A

DESCRIPTION/JUSTIFICATION THE A-10 IS BEING PROVIDED A SELF-DEFENSE AIR-TO-AIR CAPABILITY USING THE AIM-9L MISSILE. THE MODIFICATION WILL INCLUDE A SLAVED SEEKER HEAD TO PROVIDE A SLEWED MISSILE CAPABILITY.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
			2.3		220	16.6	170	9.1	290	13.4	680	41.4
BASIS FOR COST												
ESTIMATE:												
NONRECURRING			2.2									2.2
KITS					220	6.3	170	4.7	290	6.0	680	17.0
DATA			.1			1.0						1.1
SUPPORT-EQUIP						1.5						1.5
LAUNCHERS					(170)	4.0	(170)	4.4		7.4		15.8
TOOLING						3.8						3.8
TOTAL			2.3		220	16.6	170	9.1	290	13.4	680	41.4

METHOD OF IMPLEMENTATION INSTALLATION -- OTC/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIP FOR LE

MODIFICATION TITLE AND NO OUTER WING FATIGUE RESKIN, IN-103589

MODELS OF AIRCRAFT AFFECTED: F-15A

DESCRIPTION/JUSTIFICATION: TO END ACCELERATED TESTING TO DETERMINE FATIGUE LIMITS OF THE AIRFRAME, A MAJOR FAILURE OCCURRED ON THE LEFT TEST WING. THE LOWER SKIN, 25 INCHES OUTBOARD OF THE LANDING GEAR POD, COMPLETELY FAILED FROM THE FRONT SPAR TO THE REAR SPAR ALONG WITH ALL THREE LOWER SPAR CAPS AND THE UPPER FRONT SPAR CAP. THE FAILURE OCCURRED DURING AN EXTENDED TEST PROGRAM (14 TIMES 13.5 HRS).

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATES:	109	15.6	30	2.5	35	2.8	35	2.9	70	5.9	314	29.7
NONRECURRING	2	1.4									2	1.4
SITS	137	9.6	1	0.3	35	1.8	35	2.9	70	5.9	312	23.9
DATA		1.2										1.2
TOOLING		4.2										4.2
TOTAL	109	15.6	30	2.5	35	2.8	35	2.9	70	5.9	314	29.7

METHOD OF IMPLEMENTATION: INSTALLATION -- CDPOT  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO IN INTEGRATED DRIVE GENERATOR, MN-103473

MODELS OF AIRCRAFT AFFECTED: A-1J

DESCRIPTION/JUSTIFICATION THE INTEGRATED DRIVE GENERATOR HAS BEEN A MAJOR CONTRIBUTOR TO MISSION ABORTS, INFLIGHT EMERGENCIES, AND HIGH MAINTENANCE TIME. THE UNIT WILL BE MODIFIED TO INCREASE CAPACITY AND OIL COOLING CAPABILITY. THESE CHANGES WILL PROVIDE A TENFOLD INCREASE IN RELIABILITY.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
			1	1.2	149	4.6	200	5.3	289	8.2	639	19.5
BASIS FOR COST												
ESTIMATES:												
NONRECURRING			1	.8							1	.8
KITS					149	4.8	200	5.3	289	8.2	638	18.3
DATA				.1								.1
SUPPORT-EQUIP				.3								.3
TOTAL			1	1.2	149	4.6	200	5.3	289	8.2	639	19.5

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 08 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ALE-43 CORRECTION OF DEFICIENCIES, MM-103488

MODELS OF AIRCRAFT AFFECTED: A-13

DESCRIPTION/JUSTIFICATION THE ALE-40 ACCESS PANEL IS NOT SEALED AND WATER INTRUSION IS CAUSING CORROSION OF THE CHAFF AND FLARE FIRING CIRCUITS. THIS CONDITION LEADS TO MISFIRES OR NO FIRING. ADDITIONALLY, WIRING, CONNECTORS, AND ACCESS PANELS WILL BE MODIFIED TO IMPROVE MAINTAINABILITY AND SERVICEABILITY.

SCOPE OF PROGRAM

	PRICE		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST			151	2.7	200	3.7	200	4.2	94	2.0	645	12.6
ESTIMATE:												
NONRECURRING			1	.1							1	.1
KITS			150	2.5	200	3.6	200	4.1	94	2.0	644	12.2
DATA				.1		.1		.1				.3
TOTAL			151	2.7	200	3.7	200	4.2	94	2.0	645	12.6

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO TURBINE ENGINE MONITORING SYSTEM, MN-113088

MODELS OF AIRCRAFT AFFECTED: A-1J

DESCRIPTION/JUSTIFICATION THE TURBINE ENGINE MONITORING SYSTEM SELECTIVELY MONITORS ENGINE PERFORMANCE WHICH IS ULTIMATELY USED TO DETERMINE OUT OF TOLERANCE CONDITIONS. ANTICIPATED BENEFITS INCLUDE INCREASED AVAILABILITY AND MAINTENANCE EFFICIENCY, INCREASED DATA HANDLING EFFICIENCY, REDUCED LOGISTICS SUPPORT COST, AND IMPROVED ENGINE MANAGEMENT. THE T-38 ENGINE HEALTH MONITORING SYSTEM WAS SERVICE TESTED ON THE T-38 AND HAS BEEN ADAPTED FOR A-10 USAGE.

SCOPE OF PROGRAM

	FY-84		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	196	37.0	78	6.8	168	26.8	180	29.2	23	9.9	645	109.7
NONRECURRING		4.5										4.5
KITS	196	23.3	78	5.8	168	21.3	180	24.2	23	3.3	645	78.9
SUPPORT-EQUIP						2.2		2.4		3.5		8.1
MOD OF SPARES		3.7								3.1		6.8
GROUND EQUIP		3.5				3.3		2.6				9.5
TOOLING		1.9										1.9
TOTAL	196	37.0	78	6.8	168	25.8	180	29.2	23	9.9	645	109.7

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 13 MONTHS

\* LESS THAN \$ 50,000



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO TF-34 HOT SECTION, MN-122043

MODELS OF AIRCRAFT AFFECTED: A-10

DESCRIPTION/JUSTIFICATION THE ENGINE HOT SECTION, HISTORICALLY HAS BEEN THE PRIMARY CAUSE OF ENGINE MAINTENANCE. CURRENTLY, THE HOT SECTION LIFE IS LIMITED BY THE HIGH PRESSURE (HP) STAGE 1 TURBINE BLADE WHICH MUST BE REPLACED AFTER 180 HOURS OPERATING TIME AT MAXIMUM POWER (TAMP). TAMP MAINTENANCE REPRESENTS 30-40% OF THE TOTAL ENGINE CAUSED SHOP VISITS TODAY AND WILL GROW TO APPROXIMATELY 50% OVER THE NEXT FIVE YEARS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUT-YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	225	16.8	410	36.2	410	30.1	490	21.6			1535	104.7
KITS	225	10.5	410	15.5	410	16.9	490	21.6			1535	64.5
DATA		.1		1.0								1.1
SUPPORT-EQUIP				6.0		8.0						14.0
TOOLING		4.2		3.7		4.0						11.9
MOD OF SPARES		2.0										2.0
ADV PROCUPE.				10.0		1.2						11.2
TOTAL	225	16.8	410	36.2	410	30.1	490	21.6			1535	104.7

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 22 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO TF-34 VARIABLE GEOMETRY WEAR, MN-211383

MODELS OF AIRCRAFT AFFECTED: A-13

DESCRIPTION/JUSTIFICATION THIS PROGRAM INCORPORATES IMPROVED VARIABLE GEOMETRY SYSTEM LINKAGE TO MINIMIZE STALL MARGIN DETERIORATION AND PERFORMANCE SHIFTS DUE TO SYSTEM WEAR. SYSTEM VANE LEVER ARM RETAINERS WILL ALSO BE INCORPORATED TO ELIMINATE THE HAZARD OF TITANIUM COMPRESSOR FIRES CAUSED BY BLADE AND VANE FAILURES RESULTING FROM DISENGAGED VANE LEVER ARMS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST			420	2.7	420	2.3	233	1.5			1073	6.5
ESTIMATE:												
NONRECURRING				.1								.1
KITS			420	2.2	420	2.3	233	1.5			1073	6.0
DATA				.1								.1
SUPPORT-EQUIP				.4								.4
MOD OF SPARES			(287)	.3								.3
TOTAL			420	2.7	420	2.3	233	1.5			1073	6.5

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 22 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO CHEM-310

MODELS OF AIRCRAFT AFFECTED: A-1J

DESCRIPTION/JUSTIFICATION PROVIDES INTEGRATION OF CHEMICAL DEFENSE EQUIPMENT REQUIRED TO PROVIDE AIRCREW EYE/RESPIRATORY IN A CHEMICAL ENVIRONMENT. THE NEW OXYGEN SYSTEM PROVIDES POSITIVE PRESSURE BREATHING AIR WHICH REDUCES AIRCREW FATIGUE.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							350	5.3	290	3.3	640	8.6
ESTIMATE:												
NONRECURRING							1	.1			1	.1
KITS							349	3.9	290	3.3	639	7.2
DATA								.1				.1
SUPPORT-EQUIP								1.2				1.2
SIM/TRAINER								*				
TOTAL							350	5.3	290	3.3	640	8.6

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 9 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO APS-137 RWR REPLACEMENT, MN-2952

MODELS OF AIRCRAFT AFFECTED: F-49

DESCRIPTION/JUSTIFICATION PROVIDES IMPROVED THREAT WARNING TO AIRCREWS. REPLACES  
THE OUTDATED AND UNMAINTAINABLE APS-107, RADAR WARNING RECEIVER.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	197	59.5			13	5.1					210	64.6
BASIS FOR COST												
ESTIMATE:												
NONRECURRING												
KITS	197	44.5			13	4.0					210	48.5
DATA		.4				.1						.5
SUPPORT EQUIP		14.6				1.0						15.6
TOTAL	197	59.5			13	5.1					210	64.6

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO PARKHILL TAC SECURE VOICE, MN-3063

MODELS OF AIRCRAFT AFFECTED: RF-4

DESCRIPTION/JUSTIFICATION PARKHILL SECURE VOICE PROVIDES ON-LINE ENCRYPTION/DECRYPTION  
OF HF NARROW BAND FREQUENCY RANGES UP TO THE SECRET LEVEL. THE TSEC/KY-75  
IS DESIGNED FOR OPERATION IN L AIRCRAFT APPLICATIONS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	196	11.0			75	2.0	55	3.1			326	16.1
BASIS FOR COST												
ESTIMATE:												
NONRECURRING	1	2.4									1	2.4
KITS	195	5.2			75	2.0	55	2.0			325	9.2
DATA		1.8						1.1				2.9
TRAINER		1.6										1.6
TOTAL	196	11.0			75	2.0	55	3.1			326	16.1

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ALR-74 RWR UPDATE, MN-3088

MODELS OF AIRCRAFT AFFECTED: F-4E/RF-4C

DESCRIPTION/JUSTIFICATION THIS MODIFICATION WILL REPLACE THE CURRENT ALR-46 RADAR WARNING RECEIVER WITH THE ALR-74. THIS UPDATE WILL ALLOW THE F-4E/RF-4C TO OPERATE IN THE PROJECTED 1985-90 THREAT ENVIRONMENT. INSTALLATION OF THIS SYSTEM REQUIRES A LIMITED CHANGE TO THE AIRFRAME.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	81	100.9	71	43.1	111	65.9	198	98.1	185	109.7	646	417.7
BASIS FOR COST ESTIMATE:												
NONRECURRING	4	12.7									4	12.7
KITS	77	40.0	71	35.0	111	65.7	198	98.1	185	108.6	642	347.4
DATA		3.5				.2				1.1		4.8
SIM/TRAINER		3.8										3.8
SUPPORT EQUIP		30.8		2.1								38.9
TOOLING		10.1										10.1
TOTAL	81	100.9	71	43.1	111	65.9	198	98.1	185	109.7	646	417.7

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO LOROP CAMERA

MODELS OF AIRCRAFT AFFECTED: RF-4

DESCRIPTION/JUSTIFICATION THE RF-4C WILL BE EQUIPPED WITH A HIGH RESOLUTION LONG RANGE PHOTOGRAPHIC CAPABILITY USING A 65 INCH FOCAL LENGTH CAMERA. THIS ADDED CAPABILITY WILL PROVIDE BETTER OPTICAL DATA AS WELL AS IMPROVE THE SURVIVABILITY OF THE AIRCRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJ*YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	2	2.7			6	6.4	5	6.8	3	3.6	17	19.5
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS	2	2.0			6	6.0	6	6.3	3	3.1	17	17.4
DATA												
SUPPORT-EQUIP		.7				.4		.5		.5		2.1
TOTAL	2	2.7			6	6.4	6	6.8	3	3.6	17	19.5

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO RF-4 RADAR UPDATE, MN-125043

MODELS OF AIRCRAFT AFFECTED: RF-4

DESCRIPTION/JUSTIFICATION THE RF-4 RADAR (APQ-99) WILL BE MODIFIED BY REPLACING OBSOLETE AND HIGH FAILURE COMPONENTS AND INSTALLING THE DIGITAL SCAN CONVERTER IN BOTH COCKPITS. THE PAVE TACK AIRCRAFT WILL ONLY HAVE FRONT RADAR SCOPE REPLACED. DUE TO THE AGE AND TECHNOLOGY CHANGES, THE EXISTING APQ-99 HAS BECOME NONSUPPORTABLE. THE PROPOSED MODIFICATION WILL ELIMINATE PARTS OBSOLESCENCE. ADDITIONALLY, MAINTENANCE COST SAVINGS ARE EXPECTED TO BE AT LEAST \$9.0 MILLION PER YEAR.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	1	14.1	107	48.3	180	45.0	25	6.8			313	114.2
BASIS FOR COST												
ESTIMATE:												
NONRECURRING	1	9.9									1	9.9
KITS			107	27.1	180	45.0	25	6.8			312	78.9
DATA		4.2										4.2
SIM/TRAINER			(7)	13.2								13.2
SUPPORT EQUIP				7.9								7.9
TOOLING				.1								.1
TOTAL	1	14.1	107	48.3	180	45.0	25	6.8			313	114.2

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 15 MONTHS

\* LESS THAN \$ 50,000



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO INERTIAL NAVIGATION SYSTEM, MN-19501B

MODELS OF AIRCRAFT AFFECTED: F-43

DESCRIPTION/JUSTIFICATION THE OPERATIONAL READINESS OF THE F-4G IS DESPAVED  
BY LOW RELIABILITY OF THE PRESENT INERTIAL NAVIGATION ATTACK SYSTEM.  
REPLACEMENT OF THE INERTIAL NAVIGATION AND WEAPON DELIVERY SYSTEM WILL  
ENHANCE OPERATIONAL CAPABILITIES THROUGH INCREASED RELIABILITY AND MAINTAINABILITY  
RESULTING IN INCREASED WEAPON SYSTEM AVAILABILITY.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	40	51.9	36	23.6	26	18.2					102	93.7
BASIS FOR COST												
ESTIMATE:												
NONRECURRING	1	17.0									1	17.0
KIIS	39	17.8	36	21.6	26	17.6					101	57.0
DATA		5.2				.6						5.8
SUPPORT EQUIP		11.9										11.9
SIMULATORS			(3)	2.0								2.0
TOTAL	40	51.9	36	23.6	26	18.2					102	93.7

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 16 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO STRUCTURAL FATIGUE, HN-52036A

MODELS OF AIRCRAFT AFFECTED: RF-4

DESCRIPTION/JUSTIFICATION ENGINEERING EVALUATION HAS DETERMINED THAT MODIFICATION TO THE UPPER ENGINE MOUNTS, AND LOWER TORQUE BOX SKIN ON RF-4C AIRCRAFT IS REQUIRED. THIS MODIFICATION WAS DONE ON F-4C/D AIRCRAFT AND WILL IMPROVE THE STRUCTURAL INTEGRITY OF THE RF-4C AIRCRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:			1	4.8	74	2.0	80	1.1	163	2.8	318	10.7
NONRECURRING			1	1.5								1.5
KITS					74	1.0	80	1.1	163	2.8	317	4.9
DATA				.8								.8
TOOLING				2.5		1.0						3.5
TOTAL			1	4.8	74	2.0	80	1.1	163	2.8	318	10.7

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: SIMULATOR UPGRADE

MODELS OF AIRCRAFT AFFECTED: F-4

DESCRIPTION/JUSTIFICATION: UPDATE THE F-4 SIMULATOR SP-4 DIGITAL COMPUTER WITH A NEW SYSTEM. AIRCREW TRAINING HAS BEEN DEGRADED DUE TO DIMINISHING SUPPORT FOR THE INTEGRATED CIRCUITS AND ELECTRONIC COMPUTER LOGIC WHICH ARE NO LONGER PROCURABLE. THE ALR-74 CAPABILITY NOW BEING ADDED TO THE F-4E WILL BE ADDED TO THE SIMULATOR ON THIS PROGRAM.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
SASIS FOR COST ESTIMATE:					6	19.5	8	21.0			14	40.5
KITS					6	19.5	8	21.0			14	40.5
TOTAL					6	19.5	8	21.0			14	40.5

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO 4W PERFORMANCE UPDATE, MH-5144

MODELS OF AIRCRAFT AFFECTED: F-43

DESCRIPTION/JUSTIFICATION UPDATES THE F-4G AN/APR-38 SYSTEM TO PROVIDE THE CAPABILITY TO  
COUNTER THE PROJECTED THREAT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		QTY YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					31	212.0			57	314.2	98	526.2
BASIS FOR COST												
ESTIMATE:												
NONRECURRING					1	5.0					1	5.0
KITS					30	155.0			57	314.2	97	469.2
DATA						2.0						2.0
SUPPORT-EQUIP						22.0						22.0
SIM/TRAINER						8.0						8.0
TOOLING						20.0						20.0
TOTAL					31	212.0			57	314.2	98	526.2

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 24 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO 20MM AMMO LOADER

MODELS OF AIRCRAFT AFFECTED: F-4E

DESCRIPTION/JUSTIFICATION CONVERTS AIRCRAFT TO ACCEPT LINKLESS 20MM AMMUNITION LOADING AND PROVIDES NEEDED ADAPTERS, AMMUNITION LOADERS AND REPLENISHERS FOR A COMPLETE SYSTEM TO REPLACE THE EXISTING WORN-OUT LINKED LOADING SYSTEM. SUPPORT EQUIPMENT IS COMMON TO THE F-16 AND ALSO PROGRAMMED FOR THE A-7 AND F-15

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY
BASIS FOR COST							150	9.2	290	18.6	440
ESTIMATE:											27.8
NONRECURRING											
KITS							150	9.1	290	18.6	440
DATA								.1			.1
TOTAL							150	9.2	290	18.6	440
											27.8

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO CHEM/313

MODELS OF AIRCRAFT AFFECTED: F-4

DESCRIPTION/JUSTIFICATION PROVIDES FOR INTEGRATION OF CHEMICAL DEFENSE EQUIPMENT REQUIRED TO PROVIDE AIRCREW EYE/RESPIRATORY PROTECTION IN A CHEMICAL ENVIRONMENT. THE NEW OXYGEN SYSTEM PROVIDES POSITIVE PRESSURE BREATHING AIR WHICH REDUCES AIRCREW FATIGUE.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:							22	2.6	876	28.0	898	30.6
NONRECURRING												
KITS							22	.1	876	28.0	898	28.7
DATA								.3				.3
SUPPORT-EQUIP								1.5				1.5
SIM/TRAINER								0				0
TOTAL							22	2.6	876	28.0	898	30.6

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATIONS: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO AGRESSOR SQUADRON UPGRADE

MODEL OF AIRCRAFT AFFECTED: F-5

DESCRIPTION/JUSTIFICATION THE F-5E AGRESSOR AIRCRAFT WILL BE MODIFIED TO INCORPORATE A NEW LONGER RANGE RADAR AND SIMPLE RADAR WAFING RECEIVED TO UPGRADE TRAINING REALISM. THE RADAR IS CURRENTLY IN USE ON FMS F-5E AIRCRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		5YR YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					70	25.0					70	25.0
BASIS FOR COST												
ESTIMATE:												
NONRECURRING					1	1.0					1	1.0
KITS					69	22.0					69	22.0
DATA						.8						.8
SUPPORT-EQUIP						1.2						1.2
TOTAL					70	25.0					70	25.0

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO MULTI-STAGE RETROFIT PROGRAM: A/B SERIES, MW-3193

MODELS OF AIRCRAFT AFFECTED: F-15A/B

DESCRIPTION/JUSTIFICATION THIS MODIFICATION PROVIDES THE HF COMMUNICATIONS, PROGRAMMABLE SIGNAL PROCESSOR SYSTEM, NEW CENTRAL COMPUTER, ANRAAM, PROGRAMMABLE AIR WENT CONTROL SYSTEM AND SPLIT SCREEN COCKPIT TV SENSOR. THESE CHANGES WILL BE INCORPORATED ON F-15 A/B AIRCRAFT THAT ARE OPERATIONALLY ASSIGNED TO AETC AND ALASKAN AIR COMMAND.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATES:	1	11.4	4	12.5	17	29.9	33	54.7	136	219.6	191	328.1
NONRECURRING	1	9.4	4	7.6							5	17.0
FFS					17	26.9	33	50.8	136	217.6	186	295.3
DATA		2.0		.8								2.8
EQUIPMENT-EQUIP					5.0		1.4		2.0			8.4
SUPPLY/MAINT							2.5					2.5
TOOLING				4.1								4.1
TOTAL	1	11.4	4	12.5	17	29.9	33	54.7	136	219.6	191	328.1

KEYWORD: IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 24 MONTHS

\* LESS THAN \$ 50,000



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO MULTI-STAGE RETROFIT PROGRAM: C/D SERIES, NO 3192

MODELS OF AIRCRAFT AFFECTED: F-15C/D

DESCRIPTION/JUSTIFICATION THIS MODIFICATION PROVIDES PL 17 ELECTRONIC WARFARE SYSTEM UPDATE, NEW CENTRAL COMPUTER, AMRAAM, PROGRAMMABLE ARMAMENT CONTROL SYSTEM, SPLIT-SCREEN COCKPIT TV SENSOR AND ALL ENVIRONMENT ID. THE ID PORTION WILL INCLUDE 22000 VISUAL RANGE (BVR) CAPABILITY THROUGH THE USE OF INTERIM DUAL MODE RECOGNITION (IDMT) BY CIRCUIT CARD CHANGES IN THE APS-63 RADAR LRJs.

SCOPE OF PROGRAM

	FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:										
NONRECURRING	2	15.9	27	29.7	63	64.3	83	59.5	139	105.8
KITS									314	276.2
DATA	2	13.2	2	3.8					4	17.0
SUPPORT-EQUIP			25	16.8	63	42.2	83	55.6	139	94.1
SIN/TRAINER		2.2		.4						2.6
TOOLING				4.6		10.3		2.3		10.2
MOD OF SPARES		1.5		4.1		1.6		1.6		5.6
TOTAL	2	15.9	27	29.7	63	64.3	83	59.5	139	105.8

METHOD OF IMPLEMENTATION INSTALLATION -- DEPUT  
LEAD TIME -- 24 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION; AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO MULTI-STAGE RETROFIT PROGRAM: ASAT, MN-3194

MODELS OF AIRCRAFT AFFECTED; F-15A

DESCRIPTION/JUSTIFICATION THIS MODIFICATION PROVIDES NECESSARY CHANGES TO SELECTED F-15 AIRCRAFT TO ACCOMMODATE ANTI-SATELLITE DEFENSE CAPABILITIES.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST				9.0		38.1		59.0		116.1		222.2
ESTIMATE;												
NONRECURRING						2.0		.5		10.5		13.0
DATA				.3		.4		.9		1.7		3.3
SU PORT-EQUIP				.5		.8		2.0		3.5		6.8
GROUP A KITS				.4		1.6		4.1		2.2		10.3
GROUP B KITS				7.0		29.1		48.5		86.7		171.3
MOD OF SPARES				.8		2.2		3.0		11.5		17.5
TOTAL				9.0		38.1		59.0		116.1		222.2

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 24 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO 20MM AMMO LOADER

MODELS OF AIRCRAFT AFFECTED: F-15

DESCRIPTION/JUSTIFICATION CONVERTS AIRCRAFT TO ACCEPT LINKLESS 20MM AMMUNITION LOADING AND PROVIDES  
NEEDED ADAPTERS, AMMUNITION LOADERS, AND REPLENISHERS FOR A COMPLETE SYSTEM TO REPLACE THE  
EXISTING WORN-OUT LINKED LOADING SYSTEM. SUPPORT EQUIPMENT IS COMMON TO THE F-15 AND  
PROGRAMMED FOR THE A-7 AND F-4E.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							156	9.1	592	36.3	748	45.4
ESTIMATE:												
NONRECURRING												
KITS							156	9.0	592	36.3	748	45.3
DATA								.1				.1
TOTAL							156	9.1	592	36.3	748	45.4

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO CHEM-310

MODELS OF AIRCRAFT AFFECTED: F-15 A/B/C/D

DESCRIPTION/JUSTIFICATION PROVIDES INTEGRATION OF CHEMICAL DEFENSE EQUIPMENT REQUIRED TO PROTECT AIRCREW EYE/RESPIRATORY SYSTEMS IN A CHEMICAL WARFARE ENVIRONMENT. THE NEW OXYGEN SYSTEM PROVIDES CONTINUOUS POSITIVE PRESSURE BREATHING AIR WHICH REDUCES AIRCREW FATIGUE.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					463	6.4			412	5.0	875	11.4
BASIS FOR COST												
ESTIMATE:												
NONRECURRING					1	.2					1	.2
KITS					462	5.3			412	5.0	874	10.3
DATA						*						
SUPPORT-EQUIP						.8						.8
SIM/TRAINER						.1						.1
TOTAL					463	6.4			412	5.0	875	11.4

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 9 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO RADAR RECEIVER PRE-AMPLIFIER, MN-621105

MODELS OF AIRCRAFT AFFECTED: F-15A/B

DESCRIPTION/JUSTIFICATION THIS IS A COMMODITY MODIFICATION (NO GP A) WHICH REPLACES THE EXISTING PRE-AMPLIFIER MODULE IN THE APS-53 RADAR SET WITH AN INTERCHANGEABLE MODULE DESIGN FIELD EFFECT TRANSISTOR (FET), WHICH PROVIDES IMPROVED PERFORMANCE, HIGHER RELIABILITY (FROM 300 TO 1100 HRS MEAN-TIME-BETWEEN-DEMAND) AND LOWER LIFE CYCLE COSTS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	108	3.9	115	3.3	48	2.6	49	1.3			320	11.1
NONRECURRING	1	1.0									1	1.0
KITS	107	2.1	115	2.5	48	1.2	49	1.3			319	7.1
DATA		.1										.1
SUPPORT EQP												
SPARES		.7	(35)	.8	(56)	1.4						2.9
TOTAL	108	3.9	115	3.3	48	2.6	49	1.3			320	11.1

METHOD OF IMPLEMENTATION INSTALLATION -- DEPCT  
LEAD TIME -- 15 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: HOT FUEL RECIRCULATION SYSTEM, 74-440279

MODELS OF AIRCRAFT AFFECTED: F-15

DESCRIPTION/JUSTIFICATION: THE MODIFIED HOT FUEL RECIRCULATION SYSTEM REMOVES THE ELEMENT AND SHUTOFF VALVE FROM THE HEAT EXCHANGER AND INCORPORATES ONE SOLENOID OPERATED VALVE IN EACH OF THE TWO RECIRCULATION LINES. THIS MOD ELIMINATES A SERIOUS PROBLEM AND ADDS NEARLY 1% TO THE FLEETWIDE MISSION CAPABILITY RATE. IT WILL ALSO SAVE \$100,000 FOR THERMAL ELEMENTS. THE MOD HAS AN IMMEDIATE PAYOFF AND WILL BE PURCHASED AND INSTALLED AS RAPIDLY AS POSSIBLE. ALL PARTS OF THE SYSTEM ARE OF F-15 QUALIFIED DESIGN AND ARE LOCATED FOR EASY ACCESS WHEN REPLACEMENT OR REPAIR IS NECESSARY. THE MODIFIED SYSTEM HAS BEEN SUCCESSFULLY GROUND AND FLIGHT TESTED.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	151	.8			480	2.0	123	.5			754	3.3
NONRECURRING	1										1	
KITS	100	.5			480	2.0	123	.5			753	3.0
DATA		.3										.3
TOTAL	151	.8			480	2.0	123	.5			754	3.3

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 13 MONTHS

LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO IMPROVED AUGMENTOR PERFORMANCE, 44-24938U

MODELS OF AIRCRAFT AFFECTED: F-15 ENGINE

DESCRIPTION/JUSTIFICATION THIS MOD REDESIGNS THE AUGMENTOR LOGIC OVERFUEL SYSTEM TO REDUCE AUGMENTOR INITIATED FAN STALLS, ELIMINATES QUICKFILL NOISE BY DAMPING THE QUICKFILL SERVO VALVE AND REFINES THE CAM TO REDUCE THE ENGINE SUSCEPTABILITY TO RUMBLE AND ENSURE MORE ENGINE CONSISTENCY DURING TRANSIENT OPERATION.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:							317	2.7	1586	13.4	1903	16.1
KITS							317	2.5	1586	13.4	1903	15.9
DATA								.1				.1
SUPPORT-EQUIP								.1				.1
TOTAL							317	2.7	1586	13.4	1903	16.1

METHOD OF IMPLEMENTATION INSTALLATION -- DEPUT  
LEAD TIME -- 5 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ALR-74 RWR RETROFIT

MODELS OF AIRCRAFT AFFECTED: F-15C/D

DESCRIPTION/JUSTIFICATION THE ALR-74 RWR WILL BE RETRO. FITTED ONTO 244 EARLY PRODUCTION F-16C/D AIRCRAFT. THESE AIRCRAFT WERE FITTED WITH ALR-69S A THE AIRCRAFT WIRING FOR THE ALR-74 IN PRODUCTION.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-85		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					2	2.6	146	93.5	96	52.5	244	148.6
BASIS FOR COST												
ESTIMATE:												
NONRECURRING					2	1.0					2	1.0
KITS							146	93.5	96	52.5	242	146.0
DATA						.5						.5
SUPPORT-EQUIP						1.1						1.1
TOTAL					2	2.6	146	93.5	96	52.5	244	148.6

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO OPERATIONAL CAPABILITY UPGRADE

MODELS OF AIRCRAFT AFFECTED: F-15

DESCRIPTION/JUSTIFICATION THIS MODIFICATION WILL ADD ADVANCED WEAPONS CAPABILITY INCLUDING AIR-TO-AIR RADAR MISSILES TO FIVE NATIONAL GUARD SQUADRONS OF F-16 A/B AIRCRAFT. THE AIRCRAFT WILL GET A MINOR MODIFICATION TO THE CURRENT RADAR; A NEW DIGITAL SIGNAL PROCESSOR; AN ADVANCED CENTRAL INTERFACE UNIT (STORES COMPUTER); A DOUBLE SPEED, DOUBLE MEMORY, DOUBLE MUX BUS FIRE CONTROL COMPUTER. THIS PROGRAM WAS TITLED AIR DEFENSE AMRAAM CAPABILITY IN THE FY 1984 AND FY 1985 BUDGET SUBMISSIONS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	1	15.0	1	11.9	19	25.7	80	92.9	31	25.0	132	171.5
NONRECURRING	1	12.0	1	11.9							2	23.9
KITS					19	16.0	80	65.4	31	25.0	130	106.4
DATA		1.4										1.4
SUPPORT EQUIP		2.6				9.7	27.5					39.8
TOTAL	1	15.0	1	11.9	19	25.7	80	92.9	31	25.0	132	171.5

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 24 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ALL ENVIRONMENT ID

MODELS OF AIRCRAFT AFFECTED: F-15

DESCRIPTION/JUSTIFICATION THE RETROFIT OF THE AIR-TO-AIR INTERROGATION/ELECTRONIC  
WARFARE WARNING SYSTEM WILL PROVIDE THE F-15 WITH THE ABILITY TO FULLY  
EMPLOY ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE AND TO STRUCTURE TACTICS  
BASED UPON THE EXPECTED THREAT.

SCOPE OF PROGRAM	PRIOR QTY	PRIOR COST	FY-85 QTY	FY-85 COST	FY-86 QTY	FY-86 COST	FY-87 QTY	FY-87 COST	OUTYEAR QTY	OUTYEAR COST	TOTAL QTY	TOTAL COST
DATA FOR COST ESTIMATE:							180	31.5	416	145.5	596	177.0
KITS							150	31.5	416	145.5	596	177.0
TOTAL							180	31.5	416	145.5	596	177.0

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATIONS: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO COMBUSTOR SWIRLER

MODELS OF AIRCRAFT AFFECTED: F-15

DESCRIPTION/JUSTIFICATION THE COMBUSTOR WILL BE MODIFIED TO INCORPORATE A NEWLY DESIGNED SWIRLER TO IMPROVE THE FUEL TO AIR RATIO AT THE FRONT END OF THE COMBUSTOR. THIS CHANGE WILL REDUCE EXHAUST GAS SMOKE.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST			491	4.0	600	4.0					1091	8.0
ESTIMATES:												
NONRECURRING				.2								.2
KITS			491	3.0	600	4.0					1091	7.0
DATA				.2								.2
SUPPORT-EQUIP				.6								.6
TOTAL			491	4.0	600	4.0					1091	8.0

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO GEAR TYPE MAIN ENGINE FUEL PUMP

MODELS OF AIRCRAFT AFFECTED: F-15 JSAF

DESCRIPTION/JUSTIFICATION CURRENT VANE TYPE MAIN ENGINE FUEL PUMP DOES NOT PROVIDE RELIABILITY DESIRED FOR SINGLE ENGINE AIRCRAFT (F-16). GEAR TYPE PUMP HAS MUCH HIGHER RELIABILITY, LESS COST AND GREATER DURABILITY. GEAR TYPE PUMP HAS BEEN DEVELOPED FOR PRODUCTION INCORPORATION AND RETROFIT ON ALL F100-PW-200 ENGINES.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		QTY YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	458	25.4	360	22.9	211	14.7					1029	64.0
KITS	458	25.1	360	22.9	211	14.7					1029	63.7
DATA		.3										.3
TOTAL	458	25.4	360	22.9	211	14.7					1029	64.0

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 24 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: HUD AIR-9 SEEKER LAG UPDATE

MODELS OF AIRCRAFT AFFECTED: F-15C/D

DESCRIPTION/JUSTIFICATION: THIS MOD ELIMINATES AN OPERATIONAL DEFICIENCY IN THE F-16C/D HUD WHEN OPERATING IN A HIGH "G" ENVIRONMENT. THE DEFECTIVE LRJ WILL BE REPLACED TO INSURE CORRECT AIM-9 SEEKER HEAD OPERATION.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					322	5.2					322	5.2
BASIS FOR COST												
ESTIMATE:												
NONRECURRING					1	1.0					1	1.0
KITS					321	4.2					321	4.2
DATA						*						
TOTAL					322	5.2					322	5.2

METHOD OF IMPLEMENTATION: INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY 86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO IMPROVED DURABILITY COMBUSTOR

MODEL OF AIRCRAFT AFFECTED: F-15

DESCRIPTION/JUSTIFICATION SECTIONS OF THE COMBUSTOR HAVE EXPERIENCED AXIAL AND CIRCUMFERENTIAL CRACKING WHICH CAN LEAD TO A PORTION OF THE LINER BREAKING OFF AND ENTERING THE TURBINE SECTION THIS CAN CAUSE FAILURE OF TURBINE BLADES WITH INCREASED ENGINE MAINTENANCE AND CAN ALSO CAUSE POTENTIAL FLIGHT SAFETY PROBLEMS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST			406	5.4	596	5.4					1102	10.8
ESTIMATE:												
NONRECURRING				.2								.2
KITS			406	4.9	596	5.4					1102	10.3
DATA				.3								.3
TOTAL			406	5.4	596	5.4					1102	10.8

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 11 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO MAINSHAFT BEARING

MODELS OF AIRCRAFT AFFECTED: F-15

DESCRIPTION/JUSTIFICATION THE MAINSHAFT BEARING (NUMBER 5 BEARING) DEVELOPS MICROSPALLING ON THE OUTER RACE WHICH CAN LEAD TO TO LOW ROTOR STIFFNESS AND SEVERE LOW TURBINE DAMAGE. AN IMPROVED BEARING WHICH IS NOT SUBJECT TO MICROSPALLING WILL BE INSTALLED.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		O.Y. YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST			400	2.6	600	3.7					1000	6.3
ESTIMATES:												
NONRECURRING				*								
KITS			400	2.6	600	3.7					1000	6.3
TOTAL			400	2.6	600	3.7					1000	6.3

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: RWR ANTENNA PLACEMENT

MODELS OF AIRCRAFT AFFECTED: F-15A/B

DESCRIPTION/JUSTIFICATION: THIS EFFORT INVOLVES RELLOCATING THE FORWARD RWR ANTENNAS FROM THE FUSELAGE TO THE LEADING EDGE FLAP OF THE WING. THE CURRENT ANTENNA LOCATION DOES NOT ALLOW THE RWR TO MEET ITS PERFORMANCE ENVELOPE ON THE F-16. THE NEW LOCATION CORRECTS THIS DEFICIENCY.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
			144	6.0	192	5.3	192	5.4	257	7.3	785	24.0
BASIS FOR COST ESTIMATE:												
NONRECURRING				.5								.5
KITS			144	4.0	192	5.3	192	5.4	257	7.3	785	22.0
DATA				1.5								1.5
TOTAL			144	6.0	192	5.3	192	5.4	257	7.3	785	24.0

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEA. TIME -- 24 MONTHS

\* LESS THAN \$ 50,000



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO BACKUP CONTROL AUTOMATIC START SYSTEM

MODELS OF AIRCRAFT AFFECTED: F-15A/B

DESCRIPTION/JUSTIFICATION THIS PROGRAM PROVIDES FOR AN AUTOMATIC START SYSTEM FOR THE BACKUP CONTROL AND TO MAKE THE AIRSTART PROCEDURES FOR BOTH PRIMARY AND BACKUP SYSTEM THE SAME.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							650	21.7			650	21.7
ESTIMATE:												
KITS							650	21.5			650	21.5
DATA								.2				.2
TOTAL							650	21.7			650	21.7

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 15 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO NAVSTAR GPS, MN-3150

MODELS OF AIRCRAFT AFFECTED: F/F3-111

DESCRIPTION/JUSTIFICATION THE NAVSTAR GLOBAL POSITIONING SYSTEM (GPS) PROVIDES WORLDWIDE THREE-DIMENSIONAL POSITIONING/NAVIGATION FOR MILITARY AIRCRAFT. SYSTEM HAS 3 SEGMENTS: JCR EQUIPMENT, SATELLITES, AND A CONTROL NETWORK. THE SATELLITES BROADCAST ACCURATE DATA WHICH USER EQUIPMENT RECEIVES, COMPUTES THE PLATFORM POSITION AND VELOCITY AND THEN PROVIDES STEERING VECTORS TO TARGET LOCATIONS OR NAVIGATION WAYPOINTS. THE CONTROL SEGMENT DAILY UPDATES THE NAVIGATION MESSAGES BROADCAST FROM THE SATELLITES.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					1	3.1	51	12.2	339	57.8	361	73.1
BASIS FOR COST												
ESTIMATES:												
NONRECURRING					1	3.1	2	2.8	37	14.7	90	20.6
KITS							49	7.5	222	31.5	271	39.0
DATA								1.2		5.7		6.9
SUPPORT-EQUIP								.7		4.0		4.7
SIM/TRAINER										1.9		1.9
TOTAL					1	3.1	51	12.2	339	57.8	361	73.1

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 20 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, A.R. FORCE

MODIFICATION TITLE AND NO. AIM-9L CAPABILITY

MODELS OF AIRCRAFT AFFECTED: F-111

DESCRIPTION/JUSTIFICATION THE F-111 IS BEING PROVIDED A SELF-DEFENSE AIR-TO-AIR CAPABILITY USING THE AIM-9L MISSILE. THE MODIFICATION WILL INCLUDE ONLY A LIMITED POINT AND SHOOT CAPABILITY.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					335	2.5					335	2
ESTIMATE:												
NONRECURRING					1	.1					1	.1
KITS					334	.3					334	2.3
DATA						.1						.1
TOTAL					335	2.5					335	2.5

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO F-111 COUNTERMEASURE DISPENSER

MODELS OF AIRCRAFT AFFECTED: F/EF-111

DESCRIPTION/JUSTIFICATION THE ALE-40 CHAFF/FLARE DISPENSER WILL BE INSTALLED TO COUNTER THE CURRENT SURFACE TO AIR AND AIR TO AIR MISSILE THREAT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					4	3.2	65	18.7	256	71.8	325	93.7
ESTIMATE:												
NONRECURRING			4	3.0							4	3.0
KITS							65	16.7	256	67.1	321	83.8
DATA				.2				1.0				1.2
SUPPORT-EQUIP								1.0		2.0		3.0
SIM/TRAINER										2.7		2.7
TOTAL					4	3.2	65	18.7	256	71.8	325	93.7

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO P/L: "30"/"100", MN-114038

MODELS OF AIRCRAFT AFFECTED: F/F3-111A/E/D

DESCRIPTION/JUSTIFICATION MODIFICATION PROVIDES A GROUP OF 37 SPECIFIC ENGINEERING CHANGES, COMBINED INTO ONE ENGINEERING CHANGE PACKAGE, THAT WILL UPDATE AND SIGNIFICANTLY IMPROVE THE DURABILITY OF THE F-111 ENGINES.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	939	114.1	120	39.3	77	29.2					1136	182.6
KITS	939	112.6	120	39.3	77	29.2					1136	181.1
DATA		1.3										1.3
SUPPORT EQUIP		.1										.1
TOOLING		.1										.1
TOTAL	939	114.1	120	39.3	77	29.2					1136	182.6

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 24 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO F/FB-111 AVIONICS MODERNIZATION PROGRAM, MN-12356B

MODELS OF AIRCRAFT AFFECTED: F-111

DESCRIPTION/JUSTIFICATION THIS MODIFICATION PROVIDES A RELIABILITY AND MAINTAINABILITY IMPROVEMENT TO THE F/FB-111 AVIONICS SUB-SYSTEMS. THE PROGRAM INCLUDES UPGRADES TO THE INERTIAL NAVIGATION SYSTEM, TERRAIN FOLLOWING RADAR, ATTACK RADAR, DOPPLER RADAR AND CONTROLS/DISPLAYS. ONCE COMPLETE THE UPGRADES WILL PROVIDE A FOUR FOLD INCREASE IN MTBF, IMPROVED SORTIE RATES AND IMPROVED PROBABILITY OF KILL.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
		17.5	92	161.2	99	234.1	69	284.9	122	299.6	382	997.5
BASIS FOR COST												
ESTIMATE:												
NONRECURRING			3	10.4	1	43.9	1	55.5			5	109.8
KITS			89	126.8	98	175.3	68	200.0	122	293.4	377	796.5
DATA				1.6		1.5		7.0		2.0		12.1
SUPPORT-EQUIP				17.0		6.8		10.0				33.8
SIM/TRAINER		5.1		5.4		5.6		12.4		4.4		32.9
SOFT. SUPP FA		12.4										12.4
TOTAL		17.5	92	161.2	99	234.1	69	284.9	122	299.6	382	997.5

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 21 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO PIVOT FITTING FAIRING, MM-133163

MODELS OF AIRCRAFT AFFECTED: F/F3-111

DESCRIPTION/JUSTIFICATION MOISTURE PENETRATION IN THE CURRENT PIVOT FITTING FAIRING HAS CAUSED SUBSTANTIAL CORROSION. A NEW COMPOSITE AERODYNAMIC FAIRING WITH A REMOVABLE PANEL WILL BE INSTALLED. THIS WILL ALLOW FOR INSPECTION AND APPLICATION OF CORROSION PREVENTION MATERIAL.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING			1	.5	36	3.4	48	2.6	304	18.1	389	24.7
KITS					36	1.8	48	2.6	304	18.1	388	22.5
DATA				.1		.1						.2
SUPPORT-EQUIP						.7						.7
TOOLING						.8						.8
TOTAL			1	.5	36	3.4	48	2.6	304	18.1	389	24.7

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO F/FB-111 SIMULATOR UPDATE, MN-145293

MODELS OF AIRCRAFT AFFECTED: F/EF/FB-111

DESCRIPTION/JUSTIFICATION THE CURRENT F/FB-111 SIMULATOR COMPUTER HAS BECOME LOGISTICALLY UNSUPPORTABLE AND MUST BE REPLACED. ADDITIONALLY, THE SIMULATOR REQUIRES SIGNIFICANT UPDATE TO INSURE TRAINING REALISM. THE EF-111 SIMULATOR COMPUTER WILL BE USED AS THE REPLACEMENT TO MINIMIZE FLIGHT AND ENGINE SOFTWARE CHANGES. THE MOD WILL INCORPORATE ALL RECENT CHANGES TO THE AIRCRAFT INCLUDING THE BOMB/NAVIGATION CHANGES. A NEW DIGITAL RADAR LANDMASS SYSTEM WILL BE PROVIDED TO REPLACE THE CURRENT LOW RELIABILITY SYSTEM.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJY YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					2	16.0	6	31.0	5	34.0	13	81.0
BASIS FOR COST ESTIMATE:												
NONRECURRING					1	8.0	2	5.6	1	6.8	4	20.4
KITS					1	6.0	4	18.2	4	20.5	9	44.7
DATA						2.0		3.5		3.8		9.3
SUPPORT-EQUIP								3.7		2.9		6.6
TOTAL					2	16.0	6	31.0	5	34.0	13	81.0

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 15 MONTHS

\* LESS THAN \$ 50,000



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO EF-111 UPDATES

MODELS OF AIRCRAFT AFFECTED: EF-111

DESCRIPTION/JUSTIFICATION THIS PROGRAM PROVIDES HARDWARE AND SOF WARE UPDATES TO THE EF-111  
WHICH WILL MEET ANTICIPATED FUTURE THREATS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		QTY YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
						26.2			38	160.8	38	187.0
BASIS FOR COST												
ESTIMATE:												
NONRECURRING						20.0						20.0
KITS									38	145.8	38	145.8
DATA						3.0				5.0		8.0
SUPPORT-EQUIP						3.2				5.0		8.2
SIM/TRAINER										5.0		5.0
TOTAL						26.2			38	160.8	38	187.0

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 24 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO APU UPGRADE, MN-232208

MODELS OF AIRCRAFT AFFECTED: C-5A

DESCRIPTION/JUSTIFICATION THE GTC165-1 AUXILIARY POWER UNIT (APU) WAS INTRODUCED INTO AIR FORCE INVENTORY IN 1969. IT PROVIDES THE IN-FLIGHT MAIN ENGINE RESTART CAPABILITY. THIS MODIFICATION CONSISTS OF A STRONGER SURGE DUCT, AN ADJUSTABLE THERMOSTAT, A SINGLE POINT TEST PANEL, FATIGUE RESISTANT STEEL PLUMBING LINES, IMPROVED FUEL DELIVERY SYSTEM, STRONGER PERMANENT MAGNETIC GENERATOR GEAR AND A SCREEN FOR FOREIGN OBJECT DAMAGE RESISTANCE. THE MODIFICATION WILL IMPROVE OVERALL MISSION CAPABILITY, REDUCE FIELD FAILURES AND PROVIDE IMPROVED APU EFFICIENCY AND PERFORMANCE AT A REDUCED OPERATIONAL SUPPORT COST.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					77	3.1					77	3.1
BASIS FOR COST												
ESTIMATE:												
NONRECURRING					1	.5					1	.5
KITS					76	2.2					76	2.2
DATA						.2						.2
SUPPORT-EQUIP						.2						.2
TOTAL					77	3.1					77	3.1

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ENGINE VIBRATION MONITORING SYSTEM, MN-264108

MODELS OF AIRCRAFT AFFECTED: C-5A

DESCRIPTION/JUSTIFICATION EXISTING SYSTEM IS A HIGH MANHR CONSUMER AND VERY UNRELIABLE. NUMEROUS INFLIGHT ENGINE SHUTDOWNS HAVE RESULTED FROM ERRONEOUS VIBRATION INDICATIONS. MAINTENANCE MANHRS USED TO MAINTAIN THIS SYSTEM FOR THE PAST YEAR WERE 26,414 FOR 2981 MAINTENANCE ACTIONS, AND REPLACEMENT OF TRANSDUCER AND CABLE ASSEMBLIES IS COSTING \$979,000 PER YR. ENGINE INTERCHANGEABILITY REQUIREMENTS FOR BOTH THE C-5A AND C-5B REQUIRES INCORPORATION OF THIS MODIFICATION ON THE C-5B PRODUCTION AIRCRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					41	3.8	36	2.7			77	6.5
ESTIMATE:												
NONRECURRING						.1						.1
KITS					41	2.9	36	2.7			77	5.6
DATA						.8						.8
TOTAL					41	3.5	36	2.7			77	6.5

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 5 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO REPLACE OIL/FUEL FILTER SWITCHES, MN-24155B

MODELS OF AIRCRAFT AFFECTED: C-5A

DESCRIPTION/JUSTIFICATION THESE SWITCHES HAVE BECOME VERY UNRELIABLE REQUIRING FREQUENT REPLACEMENT AND MANHRS TO MAINTAIN THE SYSTEM. IN THE PAST SIX MOS AFM 66-1 DATA REFLECTS 940 MAINTENANCE ACTIONS AND 214 FAILURES CONSUMING 2801 MAINTENANCE MANHRS. REDESIGNED SWITCHES HAVE BEEN INSTALLED IN AN AIRCRAFT AND THEY HAVE ACCUMULATED APPROXIMATELY 500 FLIGHT HRS WITH NO FAILURES.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
							77	4.4			77	4.4
BASIS FOR COST												
ESTIMATE:												
NONRECURRING							1	.5			1	.5
KITS							76	3.5			76	3.5
DATA								.4				.4
TOTAL							77	4.4			77	4.4

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 7 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO REPLACE ENGINE PRESSURE RATIO SYSTEM, MN-24157B

MODELS OF AIRCRAFT AFFECTED: C-54

DESCRIPTION/JUSTIFICATION THE ENGINE PRESSURE RATIO (EPR) SYSTEM IS VERY UNRELIABLE. ALTERNATE CHARTS USING "N PRIME" RPM ARE AVAILABLE IN THE PILOTS HANDBOOK. MOST COMMERCIAL AIRLINE OPERATIONS HAVE DELETED USE OF EPR IN FAVOR OF N PRIME. IN THE PAST 6 MOS AFM 66-1 DATA REFLECTS INCREASED MAINTENANCE ACTIONS AND 211 FAILURES CONSUMING 2135 MAINTENANCE MANHRS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT/EA		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
							77	6.4			77	6.4
BASIS FOR COST												
ESTIMATE:												
NONRECURRING							1	.6			1	.6
KITS							76	5.3			76	5.3
DATA								.5				.5
TOTAL							77	6.4			77	6.4

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 8 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ALUMINUM FLIGHT CONTROLS, M4-12201A

MODELS OF AIRCRAFT AFFECTED: T-38

DESCRIPTION/JUSTIFICATION THERE ARE TWENTY-SIX MAGNESIUM COMPONENTS IN THE FLIGHT CONTROL SYSTEM OF WHICH ANY SINGLE MODE FAILURE COULD CAUSE A CATASTROPHIC MISHAP. MAGNESIUM ALLOYS HAVE BEEN BANNED FROM USE IN FLIGHT CONTROL SYSTEMS DUE TO THE STRESS CORROSION CRACKING THAT DEVELOPS. THIS MODIFICATION REPLACES THE MAGNESIUM COMPONENTS IN THE FLIGHT CONTROL SYSTEM WITH ALUMINUM COMPONENTS TO IMPROVE THE DURABILITY OF THE SYSTEM AND THE SAFETY OF THE AIRCRAFT.

SCOPE OF PROGRAM

	PRIOR		FY 85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	24	.4	119	2.0	216	4.0	216	4.2	195	4.0	770	14.6
KITS DATA	24	.4	119	2.0	216	4.0	216	4.2	195	4.0	770	14.6
TOTAL	24	.4	119	2.0	216	4.0	216	4.2	195	4.0	770	14.6

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 17 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO TERRAIN MODEL BOARD, MN-13S09B

MODELS OF AIRCRAFT AFFECTED: SIMULATORS

DESCRIPTION/JUSTIFICATION THIS MODIFICATION REPLACES THE TERRAIN MODEL BOARDS VISUAL SYSTEMS AND ASSOCIATED COMPUTER EQPT WITH A NEW STATE OF THE ART COMPUTER GENERATED IMAGERY (GCI) SYSTEM TO MEET ADVANCED TRAINING REQUIREMENTS. PROVIDES OUT-OF-THE-WINDOW TRAINING FOR VISUAL TAKE OFF AROUND AIRPORT, LOW LEVEL MANEUVERING, APPROACH AND LANDING, ALONG WITH TRANSITION FROM INSTRUMENT TO VISUAL FLIGHT OPERATIONS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					3	9.8	4	12.4	4	14.6	11	36.8
ESTIMATE:												
HITS					3	9.1	4	12.4	4	14.6	11	36.1
SUPPOPT-EQUIP						.7						.7
TOTAL					3	9.8	4	12.4	4	14.6	11	36.8

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 23 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO COMMAND SEAT SELECTION, MN-14203A

MODELS OF AIRCRAFT AFFECTED: T-35

DESCRIPTION/JUSTIFICATION SEVERAL /LASS A MISHAP FATALITIES HAVE RESULTED FROM AIRCREW EJECTION DELAYS AND SEAT COLLISIONS FROM SIMULTANEOUS EJECTIONS. DELAYS AT LOW ALTITUDES OR IN OUT OF CONTROL SITUATIONS INCREASES THE PROBABILITY OF FATALITIES RESULTING FROM OUT OF ENVELOPE EJECTIONS. THIS MODIFICATION REDUCES SYSTEM ACTIVATION BY COMMAND SELECTION. CHANCES OF SEAT COLLISIONS FROM SIMULTANEOUS EJECTION ARE ELIMINATED BY MAKING THE REAR COCKPIT OCCUPANT GO FIRST AND ALLOWING THE INSTRUCTOR PILOT TO PRE-SELECT WHICH SEAT WILL INITIATE EJECTION.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	1	.8			451	5.1	336	3.7			788	9.6
NONRECURRING	1	.8									1	.8
KITS					451	4.7	336	3.7			787	8.4
DATA						.1						.1
SIM/TRAINER						.3						.3
TOTAL	1	.8			451	5.1	336	3.7			788	9.6

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 11 MONTHS

\* LESS THAN \$ 50,000



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO DORSAL LONGERON, MN-14205A

MODELS OF AIRCRAFT AFFECTED: T-38

DESCRIPTION/JUSTIFICATION IN 1983 A DAMAGE TOLERANCE TEST (DTA) WAS ACCOMPLISHED FOR NON-SEVERE USE T-38 AIRCRAFT. IN ORDER TO EXTEND THE AIRCRAFT SERVICE LIFE THE VERTICAL PORTION OF THE DORSAL LONGERON MUST BE REPLACED.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:			15	5.1	115	5.9	144	7.8	348	21.0	622	39.8
KITS			15	.8	115	5.9	144	7.8	348	21.0	622	35.5
DATA				.7								.7
SUPPORT-EQUIP				2.2								2.2
TOOLING			(3)	1.4								1.4
TOTAL			15	5.1	115	5.9	144	7.8	348	21.0	622	39.8

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 6 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO T-5 AMPLIFIER RELOCATION, MN-14206B

MODELS OF AIRCRAFT AFFECTED: T-33

DESCRIPTION/JUSTIFICATION PRESENT INSTALLATION LOCATIONS OF THE T-5 AMPLIFIERS EXPOSE THEM TO EXCESSIVE VIBRATION AND HEAT WHICH HAS CAUSED 279 ABORTS AND 5721 MAINTENANCE MANHRS RESULTING IN A LOGISTIC SUPPORT COST OF \$346,000 FOR THE LAST TWELVE MOS. THE PRESENT MTRF IS 527 HR AND AFTER MODIFICATION IS EXPECTED TO IMPROVE TO 1277 HRS. THIS IS BASED ON THE EXPERIENCE WITH THE SAME AMPLIFIER WHICH IS AIRFRAME MOUNTED ON THE F-5. THE F-5 HAS EXPERIENCED ZERO ABORTS AND ONLY 275 UNSCHEDULED MAINTENANCE MANHRS AND \$5939 ANNUAL SUPPORT COSTS. THIS AMPLIFIER ON THE T-38 HAS ADVERSELY AFFECTED ITS OPERATIONAL READINESS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST	251	3.6	200	3.1	313	5.4					764	12.1
ESTIMATE:												
KITS	251	3.5	200	3.1	313	5.4					764	12.0
DATA		.1										.1
TOTAL	251	3.6	200	3.1	313	5.4					764	12.1

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 11 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO COCKPIT ENCLOSURE, MN-142073

MODELS OF AIRCRAFT AFFECTED: T-33

DESCRIPTION/JUSTIFICATION FATIGUE CRACKS COMBINED WITH CORROSION HAVE BEEN FOUND IN THE COCKPIT LONGERON AT AN UNUSUALLY HIGHER RATE THAN BEFORE AND REQUIRE STRENGTHENING. THE AFFECTED AREAS ARE: F.S. 146, CANOPY HOOK SLOTS AND F.S. 284 SPLICE. THE COCKPIT LONGERON WILL BE REDESIGNED TO ELIMINATE THE PRESENT HOOK SLOT METHOD OF SECURING THE CANOPY AND INCORPORATE A NEW CANOPY LATCHING SYSTEM. NEW IMPROVED CANOPY TRANSPARENCIES WILL BE INSTALLED, INCLUDING A NEW BIRD-PROOF WINDSHIELD OF COMPOSITE MATERIAL TO ENHANCE FLIGHT SAFETY, REDUCE WEIGHT AND BE OF IMPROVED STRENGTH. THE COCKPIT FLOORS WILL BE IMPROVED. THIS MODIFICATION IS PART OF THE PACER CLASSIC PROGRAM.

SCOPE OF PROGRAM	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					2	5.7			768	244.4	770	250.1
BASIS FOR COST ESTIMATE:												
NONRECURRING					1	4.3					1	4.3
KITS					1	.2			768	240.9	769	241.1
SUPPORT-EQUIP						.5						.5
SIM/TRAINER										3.5		3.5
TOOLING						.7						.7
TOTAL					2	5.7			768	244.4	770	250.1

METHOD OF IMPLEMENTATION INSTALLATION -- D'POT  
LEAD TIME -- 24 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO SKE ENHANCEMENT, MN-3033

MODELS OF AIRCRAFT AFFECTED: C-130

DESCRIPTION/JUSTIFICATION THIS NEW EQUIPMENT PROVIDES IMPROVED FORMATION POSITIONING, CONTROL, AND AIRDROP IN ADVERSE WEATHER CONDITIONS AND ELIMINATES HAZARDOUS FREQUENCY INTERFERENCE INHERENT IN PRESENT EQUIPMENT. THE PRESENT EQUIPMENT DISPLAYS FALSE TARGETS ON STATION KEEPING SCOPES, GIVES FALSE PROXIMITY WARNINGS AND INCORRECT SYSTEM PROBLEM INDICATIONS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	148	29.2	149	30.8	81	16.5					378	76.5
NONRECURRING	3	2.3									3	2.3
KITS	145	21.1	149	21.4	81	13.5					375	56.0
DATA		.2		.5		.1						.8
SIM/TRAINER				.8								.8
SUPPORT EQUIP		2.8	(55)	5.1	(34)	2.9						10.8
MOD OF SPARES		2.8		3.0								5.8
TOTAL	148	29.2	149	30.8	81	16.5					378	76.5

METHOD OF IMPLEMENTATION INSTALLATION -- DEPT/FIELD TEAM  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO SPECIAL OPERATIONS (AC), MN-3173

MODELS OF AIRCRAFT AFFECTED: AC-130H

DESCRIPTION/JUSTIFICATION EQUIPS TEN (10) AC-130H GUNSHIPS WITH WJ-1840 WIDEBAND RECEIVING SYSTEM, DIGITAL MESSAGE DEVICE GROUP (DATA BURST), IMPROVED INERTIAL NAVIGATION SYSTEM AND A FIRE CONTROL COMPUTER (FCC). ALL KITS WILL BE INSTALLED SIMULTANEOUSLY. THIS EFFORT IS IN RESPONSE TO OSD DIRECTION TO REVITALIZE THE SPECIAL OPERATIONS FORCES.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	1	22.2	7	13.4	2	3.4					10	39.0
BASIS FOR COST ESTIMATE:												
NONRECURRING	1	21.7									1	21.7
KITS			7	9.5	2	2.9					9	12.4
DATA		.5		3.0								3.5
SUPPORT-EQUIP				.7		.5						1.2
TOOLING				.2								.2
TOTAL	1	22.2	7	13.4	2	3.4					10	39.0

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO SPECIAL OPERATIONS (MC), MN-3184

MODELS OF AIRCRAFT AFFECTED: MC-133E

DESCRIPTION/JUSTIFICATION EQUIPS FOURTEEN (14) MC-133E COMBAT TALON AIRCRAFT WITH PASSIVE INFRARED WARNING RECEIVERS, DIGITAL MESSAGE DEVICE GROUP (DATA BURST), IMPROVED INERTIAL NAVIGATION SYSTEM, UPDATED ELECTRONIC COMBAT EQPT AND THE WJ-1840 WIDEBAND RECEIVER. THIS EFFORT RESPONDS TO TAC/CC REQUIREMENTS AS BRIEFED IN JUN 80 TO CSAF AND SAF, AND TO OSD DIRECTION TO MODERNIZE THE SPECIAL OPERATIONS FORCES.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	1	10.5	2	20.7	2	16.0	4	25.7	5	39.5	14	112.4
BASIS FOR COST												
ESTIMATE:												
NONRECURRING	1	9.5			2	12.2	4	25.7	5	39.5	1	9.5
KITS			2	11.6	2	12.2	4	25.7	5	39.5	13	83.6
DATA		1.0		1.4								2.4
SUPPORT-EQUIP				7.7		3.8				5.4		16.9
TOTAL	1	10.5	2	20.7	2	16.0	4	25.7	5	39.5	14	112.4

METHOD OF IMPLEMENTATION INSTALLATION - DEPOT  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO SELF-CONTAINED NAV SYSTEM (SCNS), MN-3190

MODELS OF AIRCRAFT AFFECTED: C-130

DESCRIPTION/JUSTIFICATION EQUIPS C-130 AIRCRAFT WITH A SELF-CONTAINED NAVIGATION SYSTEM (SCNS). THE SCNS WILL ENABLE C-130S TO OPERATE WITHOUT EXTERNAL NAVIGATION AIDS, SINCE IN BATTLE ZONES NAVIGATION AIDS WILL LIKELY BE SHUT DOWN OR JAMMED. THE SCNS WILL IMPROVE THE C-130 MISSION SUCCESS LIKELIHOOD, PARTICULARLY ON LOW LEVEL MISSIONS. BECAUSE OF VARIOUS TYPES OF C-130S INVOLVED, 8 AIRCRAFT WILL RECEIVE TRIAL INSTALLATION KITS. THE SCNS WILL BE PROCURED AS A SINGLE ENTITY AND WILL INCLUDE: INERTIAL NAVIGATION UNIT (INU), DOPPLER VELOCITY SENSOR (DVS), COCKPIT DISPLAY UNIT (CDU), AND AN AIR DATA COMPUTER (ADC).

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST	1	4.7	29	13.0	105	39.2	114	62.3	251	123.0	500	242.2
ESTIMATE:												
NONRECURRING	1	3.6	1	1.5	6	7.4					8	12.5
KITS			28	10.8	99	29.2	114	51.0	251	123.0	492	214.0
DATA		1.1		.3								1.4
TRAINER				.2		.7						.9
SUPPORT EQUIP				.2		.7						.9
BNCH TEST SET					(44)	1.2						1.2
SIMULATORS							(22)	11.3				11.3
TOTAL	1	4.7	29	13.0	105	39.2	114	62.3	251	123.0	500	242.2

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO HC-130H TANKER CONVERSION, MM-3200

MODELS OF AIRCRAFT AFFECTED: HC-130H

DESCRIPTION/JUSTIFICATION ENHANCES TANKER CAPABILITY FOR INFLIGHT REFUELING OF RESCUE AND SOF  
HEAVY LIFT HELICOPTERS FOR WARTIME AND CONTINGENCY TASKING THUS IMPROVING HC-130 UTILITY AND  
FLEXIBILITY FOR THE COMBAT RESCUE MISSION. THIS MODIFICATION TO BE DONE CONCURRENTLY WITH  
OTHER WING MOD.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATES:	2	2.0	6	4.5	6	5.3	6	5.6			20	17.4
NONRECURRING	1	.8									1	.8
KITS	1	.8	6	4.5	6	5.3	6	5.6			19	16.2
TOOLING		.4										.4
TOTAL	2	2.0	6	4.5	6	5.3	6	5.6			20	17.4

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 36 MONTHS

\* LESS THAN \$ 50,000



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO AERIAL SPRAY CAPABILITY, MN-3210

MODELS OF AIRCRAFT AFFECTED: C-130

DESCRIPTION/JUSTIFICATION MODIFIES SIX USAF C-130 AIRCRAFT (PE 54343F) TO REPLACE THE UC-123K  
AERIAL SPRAY CAPABILITY. THE UC-123K WILL BE PHASED OUT OF THE INVENTORY BY END OF FY87.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COS.					6	4.6					6	4.6
ESTIMATE:												
KITS					6	3.9					6	3.9
SUPPORT-EQUIP						.7						.7
TOTAL					6	4.6					6	4.6

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 6 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO C-130H CONVERSION

MODELS OF AIRCRAFT AFFECTED: C-130H

DESCRIPTION/JUSTIFICATION: CONVERTS THE C-130H CREDIBLE SPORT AIRCRAFT TO THE COMBAT TALON II  
MC-130H CONFIGURATION.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					1	13.4					1	13.4
ESTIMATE:												
NONRECURRING						1.0						1.0
KITS					1	12.2					1	12.2
DATA						.2						.2
TOTAL					1	13.4					1	13.4

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION; AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO IFR/AVIONICS UPGRADE (CS/CL)

MODELS OF AIRCRAFT AFFECTED; EC-119E

DESCRIPTION/JUSTIFICATION THIS MODIFICATION CONSISTS OF ADDING IN-FLIGHT REFUELING CAPABILITY, CHAFF/FLARE DISPENSERS FOR IMPROVED SELF-PROTECTION AND UPGRADES THE AVIONICS SUITE. THIS WILL MAKE THE AIRCRAFT MORE RESPONSIVE, IMPROVE REACTION TIME, ON-STATION ENDURANCE AND PROPAGATION ALTITUDE.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		FY-88		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					3	5.9	3	6.0	2	4.2	8	16.1
ESTIMATE;												
NONRECURRING					1	1.9					1	1.9
KITS					2	3.8	3	6.0	2	4.2	7	14.0
DATA						.1						.1
SUPPORT-EQUIP						.1						.1
TOTAL					3	5.9	3	6.0	2	4.2	8	16.1

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO MAC SATCOM ANTENNAS

MODEL'S OF AIRCRAFT AFFECTED: C-130

DESCRIPTION/JUSTIFICATION PROVIDES PERMANENTLY MOUNTED UHF SATCOM ANTENNAS WHICH WILL OPERATE WITH A TRANSPORTABLE SATCOM TERMINAL SUITABLE FOR EITHER GROUND OR AIRBORNE OPERATION. THIS EFFORT IS AN INTEGRAL PART OF THE MAC COMMAND AND CONTROL UPGRADE PROGRAM.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJ7YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:					252	4.4	190	3.1	220	3.8	662	11.3
KITS					252	3.9	190	3.1	220	3.8	662	10.8
DATA						.5						.5
TOTAL					252	4.4	190	3.1	220	3.8	662	11.3

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO FORWARD LOOKING INFRARED (FLIR), MH-3189

MODELS OF AIRCRAFT AFFECTED: MC-130E

DESCRIPTION/JUSTIFICATION THIS EFFORT COMPLETES PROCUREMENT OF THE AA2-10 FLIR FOR THE MC-130E COMBAT TALON FLEET. ALL 14 MC-130E ARE GP A EQUIPPED FOR THE AA2-10 FLIR AND NINE ALREADY HAVE FLIR GP D INSTALLED. THE INSTALLATION OF THESE FIVE FLIRs COMPLETES THE PROGRAM.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							5	3.0			5	3.0
ESTIMATE:												
KITS							5	3.0			5	3.0
TOTAL							5	3.0			5	3.0

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION; AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ARRS SPECIAL OPS LOW LEVEL

MODELS OF AIRCRAFT AFFECTED; HC-130

DESCRIPTION/JUSTIFICATION PROVIDES ELECTRONIC COUNTERMEASURES EQUIPMENT, SATELLITE COMMUNICATIONS,  
DUAL NAVIGATOR STATION AND NIGHT VISION GOGGLE (NVG) COMPATIBLE LIGHTING FOR 25 HC-130S WHICH  
WILL ENHANCE COMBAT RESCUE AND SPECIAL OPERATIONS CAPABILITIES.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							5	5.6	20	21.9	25	27.5
ESTIMATE:												
NONRECURRING							1	.1			1	.1
KITS							4	4.6	20	21.9	24	26.5
DATA								.1				.1
SUPPORT-EQUIP								.8				.8
TOTAL							5	5.6	20	21.9	25	27.5

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO AWADS VISUAL SYSTEM

MODELS OF AIRCRAFT AFFECTED: C-130E: SI ULATOR

DESCRIPTION/JUSTIFICATION PROVIDES ONE VISUAL SYSTEM FOR C-130E WEATHER AERIAL DELIVERY SYSTEMS  
TRAINING ON EMERGENCY PROCEDURES AND UNIQUE MANEUVERS, PLUS REALISTIC WORLD-WIDE MISSION  
REHEARSALS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							1	7.3			1	7.3
ESTIMATE:												
NONRECURRING							1	7.3			1	7.3
TOTAL							1	7.3			1	7.3

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIF FORCE

MODIFICATION TITLE AND NO NEW ABCCC CAPSULES

MODELS OF AIRCRAFT AFFECTED: EC-130E

DESCRIPTION/JUSTIFICATION PROVIDES FOR SEVEN NEW ABCCC CAPSULES WITH REQUIRED SPACE AND SP 4 EQP'T TO ACCOMMODATE ALL REQUIRED EQUIPMENT SCHEDULED FOR INTEGRATION WITH THE CAPSULES. EXISTING CAPSULES REQUIRE UNECONOMICAL STRUCTURAL REPAIR AND AVIONICS MODIFICATION TO MAINTAIN MISSION CAPABILITY AND STRUCTURAL INTEGRITY, AND EVEN IF THAT WERE FEASIBLE THERE IS SERIOUS DOUBT AS TO THEIR ABILITY TO MEET FUTURE REQUIREMENTS. PROCUREMENT OF NEW CAPSULES WILL ENSURE REQUIRED INTERFACE WITH SYSTEMS SCHEDULED TO BE INTEGRATED IN THE CAPSULES AND WILL PROVIDE GROWTH POTENTIAL NEEDED TO MEET FUTURE COMMAND AND CONTROL REQUIREMENTS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							1	12.5	6	31.5	7	44.0
ESTIMATE:												
NONRECURRING								1.7				1.7
KITS							1	6.5	6	31.5	7	38.0
DATA								1.5				1.5
SUPPORT-EQUIP								2.8				2.8
TOTAL							1	12.5	6	31.5	7	44.0

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO TRACALS/WEATHEP (MLS)

MODELS OF AIRCRAFT AFFECTED: C 130

DESCRIPTION/JUSTIFICATION THIS MODIFICATION INSTALLS COMMERCIAL MICRO-WAVE LANDING SYSTEM (MLS)  
AVIONICS ON MAC C-130s.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							80	4.3	296	15.4	376	23.7
ESTIMATE:												
KITS							80	4.3	296	19.4	376	23.7
TOTAL							80	4.3	296	19.4	376	23.7

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO FLIGHT DATA RECORDER, MH-10603A

MODELS OF AIRCRAFT AFFECTED: C-130

DESCRIPTION/JUSTIFICATION FOUR C-130 MISHAPS DURING 1978, EACH INVOLVING LOSS OF AIRCRAFT AND HUMAN LIFE, EMPHASIZE THE NEED FOR A RECORDER SYSTEM. WHEN ALL CREW MEMBERS ARE FATALY INJURED AND THERE IS NO RECORDER EVIDENCE AVAILABLE, THE ACCIDENT INVESTIGATION BOARD MEMBERS USUALLY MUST SURMISE THEIR CONCLUSIONS AS TO THE POSSIBLE CAUSES OF THE ACCIDENT. FOLLOW-ON ACTION OFTEN HAS LEAD TO EXPENSIVE FORCE RETROFITS OR FORCE DOWNTIMES WHICH MAY OR MAY NOT HAVE BEEN NEEDED. A RECORDER SYSTEM SHOULD PRECLUDE ACCIDENT BOARD CONCLUSIONS BASED ON INSUFFICIENT DATA AND THUS ELIMINATE UNNECESSARY RETROFITS AND COSTLY DOWNTIME AS A RESULT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	424	17.9	240	8.7	62	3.0					726	29.6
NONRECURRING	7	.3									7	.3
WITS	417	13.6	240	8.7	62	2.6					719	24.9
DATA		2.1										2.1
TRAINER/SIMUL					(22)	.4						.4
SUPPORT EQUIP		1.9										1.9
TOTAL:	424	17.9	240	8.7	62	3.0					726	29.6

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 8 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATIONS: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO FUEL CELL FOAM, MN-10618A

MODELS OF AIRCRAFT AFFECTED: C-130

DESCRIPTION/JUSTIFICATION INSTALLS MIL-B-830549(BLUE) RETICULATED POLYESTER FOAM IN ALL FUEL CELLS/TANKS. REQUIRED TO PROVIDE EXPLOSION/FIRE SUPPRESSION FROM CAUSES SUCH AS: STRAY VOLTAGE, LIGHTNING STRIKES, HOSTILE ACTION FIRES, ETC. TWO C-130 LOSSES HAVE OCCURRED BECAUSE OF INTANK EXPLOSIONS WHICH MIGHT HAVE BEEN PREVENTED BY THE NEW FOAM.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	500	31.3	88	4.6	92	4.8					680	40.7
NONRECURRING KITS DATA	2	.3									2	.3
	496	31.0	88	4.6	92	4.8					678	40.4
TOTAL	500	31.3	88	4.6	92	4.8					680	40.7

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 5 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO KC-135R MODERNIZATION, MN-3009

MODELS OF AIRCRAFT AFFECTED: KC-135 A/E/Q

DESCRIPTION/JUSTIFICATION THE KC-135R MODERNIZATION PROGRAM HELPS TO ALLEVIATE THE AIR FORCE AIR REFUELING SHORTFALL BY MAKING SYSTEM CHANGES THAT INCREASE THE FUEL OFFLOAD POTENTIAL TO 1.5 TIMES THAT OF THE PRESENT TANKERS, THE KC-135A/Q, AND 1.3 TIMES THAT OF THE KC-135E. THE MORE POWERFUL, EFFICIENT F-108 ENGINE (COMMERCIAL: CFM56-2) ALLOWS TAKEOFF WITH 14000 POUNDS MORE FUEL IN LESS DISTANCE AND REDUCES TANKER FUEL CONSUMPTION BY 27 PERCENT. THE QUIETER, CLEANER F-108 ENGINES MEET OR EXCEED ALL NOISE AND POLLUTION STANDARDS. OVER 25 OTHER SYSTEMS/SUBSYSTEMS UPDATES INCLUDING THE LANDING GEAR WILL EXTEND THE LIFE OF THE KC-135R INTO THE 21ST CENTURY.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	59	1184.7	43	705.3	43	697.7	50	971.4	194	4173.2	389	7732.3
NONRECURRING		33.6		2.0		1.5						37.1
KEYS	59	497.8	43	269.3	43	260.4	50	302.5	194	1205.6	389	2537.6
DATA		37.4		15.1		5.7		6.5		23.5		88.2
SUPPORT-EQUIP		42.0		25.6		25.5		28.0		92.8		213.9
SYM/TRAINEE		9.3										9.3
TOOLING		92.6										92.6
ENGINE		470.0	(150)	393.3	(172)	404.6	(200)	634.4		2851.3		4753.6
ADVANCE PROC		22.2										22.2
ADV PROC CR		.8										.8
TOTAL	59	1184.7	43	705.3	43	697.7	50	971.4	194	4173.2	389	7732.3

METHOD OF IMPLEMENTATION INSTALLATION -- CONTRACTOR FACILITY  
LEAD TIME -- 30 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO TUBULAR HEAT EXCHANGER, MM-633603

MODELS OF AIRCRAFT AFFECTED: C-130A

DESCRIPTION/JUSTIFICATION: HEAT EXCHANGERS INCLUDED IN THE FY74 C-130H PRODUCTION AIRCRAFT ARE NO LONGER IN PRODUCTION. REPLENISHMENT SPARES ARE NO LONGER AVAILABLE AND THE SPARES PIPELINE WILL ONLY LAST THROUGH FY85. THIS EFFORT INCLUDES MODIFICATION OF THE REFRIGERATION UNIT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST			2	.2	24	2.8	24	2.9	33	4.3	83	10.2
ESTIMATE:												
NONRECURRING			1	.1							1	.1
KITS			1	.1	24	2.8	24	2.9	33	4.3	82	10.1
TOTAL			2	.2	24	2.8	24	2.9	33	4.3	83	10.2

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 9 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO OUTER WING, MN-196108

MODELS OF AIRCRAFT AFFECTED: C/HC-130B/E/H/P/N

DESCRIPTION, JUSTIFICATION: STRUCTURAL INTEGRITY DATA INDICATES REQUIREMENT FOR OUTER WING MODIFICATION BECAUSE OF FATIGUE AND CORROSION PROBLEMS AT SEVERAL LOCATIONS ON THE WING. FAILURES HAVE OCCURRED IN THE OUTER WING LOWER FRONT BEAM CAPS, WITH RELATED CRACKS FOUND IN SPAR WEBS AND LOWER FORWARD WING SKIN PANELS. STRESS CORROSION CRACKING HAS BEEN IDENTIFIED IN THE WING DRY BAYS. INTERIM SOLUTIONS OF REPAIRING/REPLACING FAILED COMPONENTS HAVE BEEN IMPLEMENTED UNTIL THE WING BOXES CAN BE REPLACED, INCLUDING GROSS WEIGHT LIMITS FOR CERTAIN MISSIONS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST	276	202.2	132	102.2	84	73.6					492	378.0
ESTIMATE:												
NONRECURRING		7.2										7.2
KITS	276	183.0	132	102.2	84	73.6					492	358.8
DATA		.9										.9
TOOLING		11.1										11.1
TOTAL	276	202.2	132	102.2	84	73.6					492	378.0

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LEAD TIME -- 30 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO NAVSTAR GPS RETROFIT, MM-3150

MODELS OF AIRCRAFT AFFECTED: RC-135

DESCRIPTION/JUSTIFICATION THE NAVSTAR GLOBAL POSITIONING SYSTEM (GPS) IS A SPACE-BASED RADIO NAVIGATION SYSTEM THAT WILL PROVIDE SUITABLY EQUIPPED MIL. VEHICLES WITH HIGHLY ACCURATE, JAM-RESISTANT, THREE-DIMENSIONAL POSITION, VELOCITY, AND TIME DATA, WORLDWIDE IN ALL WEATHER TO IMPROVE MISSION EFFECTIVENESS. THIS MODIFICATION INSTALLS GPS USER EQUIPMENT IN RC-135 AIRCRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					11	5.2	10	2.8			21	8.0
BASIS FOR COST												
ESTIMATE:												
NONRECURRING					1	1.0					1	1.0
KIT					10	2.1	10	2.0			20	4.1
DATA						1.2						1.2
SUPPORT-EQUIP						.9						.9
SIM/TRAINED								.8				.8
TOTAL					11	5.2	10	2.8			21	8.0

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 20 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO STANDARD VHF AM/FM RADIO, MN-3042

MODELS OF AIRCRAFT AFFECTED: C/KC/EC/PC/MC-135

DESCRIPTION/JUSTIFICATION SELECTED AIRCRAFT ARE AFFECTED BY THE FAA AND THE AIR NATIONAL CIVIL AVIATION ORGANIZATION (ICAO) IMPLEMENTATION ON 1 JANUARY 1977 OF 25KHZ CHANNEL COMMUNICATION WHERE VHF/AM IS THE PRIMARY FREQUENCY BAND FOR CIVILIAN/MILITARY AIR TRAFFIC CONTROL. THIS MODIFICATION WILL PROVIDE FOR IMPROVED RELIABILITY AND MAINTAINABILITY AND MEETS FAA/ICAO REQUIREMENTS. C-135 AIRCRAFT ARE OPERATING UNDER WAIVERS AT CERTAIN LOCATIONS AT PRESENT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	1	1.9	125	2.3	156	2.8	152	2.8	221	4.0	655	13.8
NONRECURRING	1	1.0									1	1.0
KITS			125	2.3	156	2.8	152	2.8	221	4.0	654	11.9
SUPPORT EQUIP		.9										.9
TOTAL	1	1.9	125	2.3	156	2.8	152	2.8	221	4.0	655	13.8

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATIONS: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO NUCLEAR HARDENING/UHF REPLACEMENT, MW-3156

MODELS OF AIRCRAFT AFFECTED: EC-135A/C/G/H/L/J/P

DESCRIPTION/JUSTIFICATION REPLACES COMPONENTS (UHF RADIOS, MULTIPLEXER, SWITCHBOARD, INTERPHONE) WITH MINIATURIZED STATE OF THE ART, EMP HARDENED COMPONENTS ON EC-135 AIRCRAFT. TO ACCOMMODATE SUPPORTABILITY PROBLEMS WITH THE ARC-89 RADIO, AN EARLY SWAPOUT ON EC-135L AIRCRAFT WILL BE ACCOMPLISHED. FY83 FUNDS THE ARC-89 SWAPOUT ON THE EC-135L (5 ACFT), WITH INSTALLATIONS IN FY84.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	3	59.4	8	44.8	12	46.5	11	46.2	5	22.3	39	219.2
BASIS FOR COST ESTIMATE:												
NONRECURRING	2	20.2	4	23.4	1	5.2					7	48.8
KITS	1	12.6	4	15.6	11	41.3	11	43.4	5	22.1	32	135.0
DATA		15.1		5.8						.2		21.1
SUPPORT-EQUIP								2.8				2.8
SUPPORT EQUIP		11.5										11.5
TOTAL	3	59.4	8	44.8	12	46.5	11	46.2	5	22.3	39	219.2

METHOD OF IMPLEMENTATION INSTALLATION -- DEPGT  
LEAD TIME -- 20 MONTHS

\* LESS THAN \$ 10,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO MILSTAR AFSATCOM TERM UPGRADE/DUAL MODEM

MODELS OF AIRCRAFT AFFECTED: RC-135/EC-135A/G

DESCRIPTION/JUSTIFICATION: MODIFICATION PROVIDES PRINTED CIRCUIT BOARD REPLACEMENTS FOR THE AFSATCOM TERMINAL DUAL MODEM. MODIFICATION REQUIRED TO TRANSITION THESE TERMINALS TO MILSTAR, RESOLVE A POTENTIAL FREQUENCY INTERFERENCE PROBLEM, CORRECT FOT&E DEFICIENCIES AND TO PROVIDE PROPER FREQUENCY-HOPPING ALGORITHM FOR COMPATIBILITY WITH CHANGES BEING MADE TO THE AFSATCOM SATELLITE TRANSPONDER ON THE SATELLITE DATA SYSTEMS SPACECRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:					27	4.2					27	4.2
NONRECURRING						.1						.1
KITS					27	2.2					27	2.2
DATA						.2						.2
SUPPORT-EQUIP						.5						.5
TOOLING						1.2						1.2
TOTAL					27	4.2					27	4.2

METHOD OF IMPLEMENTATION: INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 11 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION; AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO PEACEKEEPER/MINUTEMAN COMMON ALCC

MODELS OF AIRCRAFT AFFECTED; EC-135A/C/G

DESCRIPTION/JUSTIFICATION PROVIDES AIRBORNE LAUNCH CONTROL CENTER CAPABILITY FOR PEACEKEEPER  
AND MINUTEMAN IN 22 EC-135 A/C/G AIRCRAFT. IOC TO BE MET WITH 3 RDT&E AIRCRAFT IN FY 86.

SCOPE OF PROGRAM	PRIOR QTY COST	FY-85 QTY COST	FY-86 QTY COST	FY-87 QTY COST	OJT YEAR QTY COST	TOTAL QTY COST
		1 6.8	7 2.3	4 14.9	10 42.2	22 96.2
BASIS FOR COST ESTIMATE:						
NONRECURRING		1 6.8				1 6.8
KITS			7 26.1	4 14.9	10 38.3	21 79.3
DATA			3.9		.8	4.7
SUPPORT-EQUIP			2.3		3.1	5.4
TOTAL		1 6.8	7 32.3	4 14.9	10 42.2	22 96.2

METHOD OF IMPLEMENTATION INSTALLATION -- CONTRACTOR FACILITY  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION, AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO. WWABNCP INTERIM MMPM (WIM)

MODELS OF AIRCRAFT AFFECTED: EC-135

DESCRIPTION/JUSTIFICATION: PROCURES AND INSTALLS MESSAGE PROCESSING MODE (MMPM) CAPABILITY ON VLF/LF SYSTEM. WILL SIGNIFICANTLY IMPROVE EAM TRANSMISSION ACCURACY, SHORTEN TRANSMISSION TIME, AND IMPROVE RANGE. WILL MAKE THE WWABNCP VLF/LF SYSTEM COMPATIBLE WITH NAVY TACAMO AIRCRAFT AND TPIDEN; SSRMS (MMPM TO BE INSTALLED IN FY85). ALSO PROVIDES A SYSTEM THAT WILL BE COMPATIBLE WITH VLF/LF MINIATURE RECEIVE TERMINALS (MRTS) SCHEDULED TO BE INSTALLED ON STRATEGIC BOMBERS. PROVIDES AN INTERIM CAPABILITY UNTIL THE DIVERSITY RECEPTION EQUIPMENT IS COMPLETED.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:					12	8.5					12	8.5
NONRECURRING						2.7						2.7
KITS					12	3.4					12	3.4
DATA						1.3						1.3
SUPPORT-EQUIP						1.1						1.1
TOTAL					12	8.5					12	8.5

METHOD OF IMPLEMENTATION: INSTALLATION -- CONTRACTOR FACILITY  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO DIVERSITY RECEPTION EQUIPMENT, MN-3067

MODELS OF AIRCRAFT AFFECTED: EC-135H/K/P/C

DESCRIPTION/JUSTIFICATION THE DIVERSITY RECEPTION EQUIPMENT (DRE) IS A MODIFICATION TO THE AN/ALP-96 VLF/LF SYSTEM. A TWO CHANNEL PROCESSOR WILL BE INCORPORATED TO COMBINE THE PRESENT VERTICALLY POLARIZED SIGNALS WITH THE NEW HORIZONTALLY POLARIZED SIGNALS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
							5	17.2	19	83.9	24	101.1
BASIS FOR COST ESTIMATE:												
NONRECURRING							1	3.1	2	6.1	3	9.2
KITS							4	13.9	17	31.6	21	65.5
DATA								.2		3.0		3.2
SUPPORT-EQUIP										23.2		23.2
TOTAL							5	17.2	19	83.9	24	101.1

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 15 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO CINCENT AIRCRAFT REFURBISHMENT

MODELS OF AIRCRAFT AFFECTED: EC-135H/Y

DESCRIPTION/JUSTIFICATION: MODIFIES CINCENT AIRCRAFT EC-135H (SN 61-0327) WITH AN ONLOAD AIR REFUELING CAPABILITY; A COMMUNICATIONS SUITE TO INCLUDE UHF SATCOM ANTENNA, HF ANTENNA, UHF AND VHF/FM RECEIVERS/TRANSMITTERS AND SECURE VOICE CAPABILITY; AND UPGRADE OF THE AIRCRAFT INTERIOR TO PROVIDE FOR A CINCENT COMMAND AIRCRAFT. IT ALSO MODIFIES EC-135Y (SN 55-3175) WITH AN ONLOAD AIR REFUELING CAPABILITY AND THE SAME COMMUNICATIONS SUITE AS SN 61-0327.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYE/R		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							2	15.9			2	15.9
ESTIMATE:												
NONRECURRING								1.4				1.4
KITS							2	14.2			2	14.2
DATA								.2				.2
SUPPORT-EQUIP								.1				.1
TOTAL							2	15.9			2	15.9

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION, AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO GROUNDWAVE EMERGENCY NETWORK

MODELS OF AIRCRAFT AFFECTED: EC-135C/P/J

DESCRIPTION/JUSTIFICATION GWEN PROVIDES STRATEGIC FORCES, MISSILE WARNING SITES, AND COMMAND CENTERS WITH THE ABILITY TO MAINTAIN LONG RANGE CONNECTIVITY IN A NUCLEAR ENVIRONMENT. CONSIST OF UNMANNED RADIO RELAY STATIONS AND USER TERMINALS (GROUND AND AIRBORNE).

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							5	10.4	16	26.1	21	36.5
ESTIMATE:												
NONRECURRING							1	5.0			1	5.0
KITS							4	3.2	16	12.8	20	16.0
DATA										9.3		9.3
SUPPORT-EQUIP							2.2			4.0		6.2
TOTAL							5	10.4	16	26.1	21	36.5

METHOD OF IMPLEMENTATION INSTALLATION -- CONTRACTOR FACILITY  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO 10405

MODELS OF AIRCRAFT AFFECTED: EC-135

DESCRIPTION/JUSTIFICATION PROVIDES RELIABLE AND TIMELY NUCLEAR DETONATION INFORMATION TO THE NSA  
AND SIGP CINCS FOR ATTACK ASSESSMENT, FORCE RECOVERY, AND FORCE MANAGEMENT.

SCOPE OF PROGRAM

	PRICE		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BAGS FOR COST- ESTIMATE:							4	47.1	20	103.2	24	150.3
NONRECURRING							3	26.1	1	9.3	4	35.4
KITS							1	3.8	19	53.2	20	87.0
DATA								11.9		6.3		18.2
SUPPORT-EQUIP								5.3		4.4		9.7
TOTAL							4	47.1	20	103.2	24	150.3

METHOD OF IMPLEMENTATION INSTALLATION -- CONTRACTOR FACILITY  
LEAD TIME -- 18 MONTHS



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO 49-26 UPGRADE

MODELS OF AIRCRAFT AFFECTED: SIMULATOR

DESCRIPTION/JUSTIFICATION UPDATES MB-26 (KC-135) OPERATIONAL FLIGHT TRAINER TO CURRENT CONFIGURATION, REPLACES UNSUPPORTABLE SYSTEMS, AND PROVIDES NEW COMPUTATIONAL AND VISUAL SYSTEMS AND A MOTION BASE.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:							6	34.7	12	68.3	18	103.0
KITS							6	29.2	12	61.1	18	90.3
DATA								3.4		1.9		5.3
SUPPORT-EQUIP								2.1		5.3		7.4
TOTAL							6	34.7	12	68.3	18	103.0

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO MILSTAR JHF TRANSITION

MODELS OF AIRCRAFT AFFECTED: EC-135C/P/A/J

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION REPLACES CURRENT AFSATCOM PROCESSORS, MODEMS, POWER AMPLIFIERS INPUT/OUTPUT DEVICES AND ANTENNAS WITH MILSTAR-COMPATIBLE HARDWARE. ALL HARDWARE IS WELL WITHIN CURRENT STATE-OF-THE-ART TECHNOLOGY AND WILL REMAIN ON THE AIRCRAFT WHEN THE MILSTAR JHF CAPABILITY IS ADDED. THIS MODIFICATION IS REQUIRED TO TRANSITION THESE TERMINALS TO MILSTAR, RESOLVE A POTENTIAL FREQUENCY INTERFERENCE PROBLEM, CORRECT FOT&E DEFICIENCIES AND TO PROVIDE PROPER FREQUENCY-HOPPING ALGORITHM FOR COMPATABILITY WITH CHANGES BEING MADE TO THE AFSATCOM TRANSPONDER ON THE SATELLITE DATA SYSTEMS SPACECRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
							25	69.1			25	69.1
BASIS FOR COST												
ESTIMATE:												
NONRECURRING								1.5				1.5
KITS						25	54.6				25	54.6
DATA							4.5					4.5
SUPPORT-EQUIP							8.5					8.5
TOTAL							25	69.1			25	69.1

METHOD OF IMPLEMENTATION: INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO REGENCY NET

MODELS OF AIRCRAFT AFFECTED: EC-135H

DESCRIPTION/JUSTIFICATION PROVIDE CAPABILITY FOR USCINCEUR ABMCP TO INJECT EMERGENCY ACTION  
MESSAGES DIRECTLY INTO THE REGENCY NET WITHOUT DEPENDENCE ON GROUND ENTRY POINTS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							2	14.0	2	7.0	4	21.0
ESTIMATE:												
NONRECURRING								2.8				2.8
KITS					2	8.0			2	6.5	4	14.5
DATA						.7						.7
SUPPORT-EQUIP						2.5		.5				3.0
TOTAL							2	14.0	2	7.0	4	21.0

METHOD OF IMPLEMENTATION INSTAL. AT ON -- CONTRACTOR FACILITY  
LEAD TIME -- 24 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO REPLACE MC-1 AUTOPILOT, MN-13405A

MODELS OF AIRCRAFT AFFECTED: C-135

DESCRIPTION/JUSTIFICATION REPLACES MC-1 AUTOPILOT AND AUTOPILOT WIRING WITH AN OFF-THE-SHELF STATE OF THE ART SYSTEM DUE TO FREQUENT FAILURES AND UNCOMMANDED INPUTS. 800 UNCOMMANDED INPUTS WERE REPORTED IN A SIX-MONTH REPORTING PERIOD; RECENT INSPECTION REVEALED 23% OF ALL AIRCRAFT HAD FAULTY WIRING.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	16	14.7	216	27.2	300	30.4	213	22.2			745	94.5
BASIS FOR COST ESTIMATE:												
NONRECURRING	3	13.4									3	13.4
KITS	13	1.3	216	21.2	300	27.9	213	22.2			742	72.6
DATA				1.5		2.5						4.0
SUPPORT-EQUIP				2.6								2.6
SIM/TRAINER				1.9								1.9
TOTAL	16	14.7	216	27.2	300	30.4	213	22.2			745	94.5

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 19 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO LIFE EXTENSION-WING RESKIN, MN-143023

MODELS OF AIRCRAFT AFFECTED: C-135

DESCRIPTION/JUSTIFICATION SERVICE LIFE OF C-135 AIRCRAFT IS 8,500 TANKER EQUIVALENT FLYING HOURS. REPLACEMENT OF LOWER WING SKIN IS REQUIRED TO ALLOW THE AIRCRAFT TO MEET PROGRAMMED SERVICE LIFE.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		CJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST	605	247.2	72	36.5	72	38.9					749	322.6
ESTIMATE:												
KITS	456	195.5	72	36.5	72	38.9					600	270.9
PRIOR YRS	149	51.7									149	51.7
TOTAL	605	247.2	72	36.5	72	38.9					749	322.6

METHOD OF IMPLEMENTATION INSTALLATION -- CONTRACTOR FACILITY  
LEAD TIME -- 22 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ENGINE CONVERSION, MM-13311C

MODELS OF AIRCRAFT AFFECTED: C-12

DESCRIPTION/JUSTIFICATION THE ARMY C-12 AND THE COMMERCIAL AIRCRAFT HAVE CONVERTED TO MORE CURRENT MODEL OF THE PT-6A ENGINE NOW USED IN THE AIR FORCE AIRPLANES. THE SMALL NUMBER OF USAF C-12'S ARE BECOMING EXPENSIVE TO SUPPORT THEREFORE, THE ENGINES WILL BE CONVERTED TO THE STANDARD CURRENT CONFIGURATION.

SCOPE OF PROGRAM	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:			3	1.3	12	5.0	12	5.1	2	1.1	29	12.5
KITS			3	1.3	12	5.0	12	5.1	2	1.1	29	12.5
DATA												
TOTAL			3	1.3	12	5.0	12	5.1	2	1.1	29	12.5

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 5 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-80 PROGRAM

FY-80 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO HAVE QUICK A NET

MODELS OF AIRCRAFT AFFECTED: E-3A

DESCRIPTION/JUSTIFICATION PROVIDES FOUR ADDITIONAL HAVE QUICK-EQUIPPED RADIOS AND INTEGRATES THE  
XETRON FAST-TUNING FILTER TO PROVIDE A-NETS LINKS (VICE B-NETS) FOR ALL EIGHT HAVE QUICK RADIOS  
ON THE E-3A. MOD IS REQUIRED TO ENHANCE COMMUNICATIONS EFFECTIVENESS IN A JAMMING ENVIRONMENT.

SCOPE OF PROGRAM

	PRIOR QTY COST	FY-85 QTY COST	FY-86 QTY COST	FY-87 QTY COST	OUTYEAR QTY COST	TOTAL QTY COST
BASIS FOR COST		3 10.6	9 25.5	9 24.3	12 32.0	33 92.4
ESTIMATE:						
KITS		3 7.1	9 25.5	9 24.3	12 32.0	33 88.9
DATA		.5				.5
SUPPORT-EQUIP		3.0				3.0
TOTAL		3 10.6	9 25.5	9 24.3	12 32.0	33 92.4

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 19 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO AN/APY-1 RADAR SYSTEM, MN-11603B

MODELS OF AIRCRAFT AFFECTED: E-3A

DESCRIPTION/JUSTIFICATION DURING DESIGN/PRODUCTION OF THE AN/APY-2 RADAR (AWACS STANDARD), 74 ITEMS WHICH WERE TO HAVE BEEN COMMON TO THE AN/APY-1 (AWACS CORE) WERE MODIFIED. THERE ARE NOW 15 CONFIGURATIONS ON THE 24 CORE AIRCRAFT, RESULTING IN OPERATIONAL AND SUPPORT DIFFICULTIES. MODIFICATION WILL BRING APY-1 ITEMS UP TO APY-2 CONFIGURATION AND ALLOW TWO-WAY INTERCHANGABILITY ON THE COMMON ITEMS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST			1	4.7	11	6.5	12	5.3			24	16.5
ESTIMATE:												
NONRECURRING			1	3.3							1	3.3
ITEMS					11	5.0	12	5.3			23	10.3
DATA				1.4		1.5						2.9
TOTAL			1	4.7	11	6.5	12	5.3			24	16.5

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 24 MONTHS

\* LESS THAN \$ 50,000



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO NAVSTAR GPS, MN-3150

MODELS OF AIRCRAFT AFFECTED: E-3A

DESCRIPTION/JUSTIFICATION NAVSTAR GLOBAL POSITIONING SYSTEM (GPS) PROVIDES WORLDWIDE THREE-DIMENSIONAL POSITIONING/NAVIGATION FOR MILITARY AIRCRAFT. THE SYSTEM HAS THREE SEGMENTS: USER EQUIPMENT, SATELLITES, AND A CONTROL NETWORK. SATELLITES BROADCAST ACCURATE DATA WHICH USER EQUIPMENT RECEIVES, COMPUTES PLATFORM POSITION AND VELOCITY, THEN PROVIDES STEERING VECTORS TO TARGET LOCATIONS OR NAVIGATION WAYPOINTS. THE CONTROL SEGMENT DAILY UPDATES THE NAVIGATION MESSAGES BROADCAST FROM THE SATELLITES.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
							1	4.4	33	8.3	34	12.7
BASIS FOR COST												
ESTIMATE:												
NONRECURRING							1	2.5			1	2.5
KITS									33	5.2	33	5.2
DATA										2.5		2.5
SUPPORT-EQUIP							1.9			.3		2.2
SIM/TRAINER										.3		.3
TOTAL							1	4.4	33	8.3	34	12.7

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 30 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO AWACS ESM (AIR DEF)

MODELS OF AIRCRAFT AFFECTED: E-3A

DESCRIPTION/JUSTIFICATION THE ELECTRONIC SUPPORT MEASURES (ESM) SET WILL ALLOW THE E-3 TO PASSIVELY DETECT, LOCATE, AND IDENTIFY AIRBORNE, SHIPBORNE, AND GROUND BASED EMITTERS. ESM EQUIPMENT WILL BE STANDALONE. CONTROL AND DISPLAY FUNCTIONS WILL BE INTEGRATED WITH E-3 SITUATION DISPLAY CONSOLES (SDC) CONTROLS AND DISPLAYS. ESM DATA WILL NOT BE AUTOMATICALLY CORRELATED ("FUSED") WITH E-3 RADAR DATA.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
							5	23.1	28	109.4	33	132.5
BASIS FOR COST												
ESTIMATE:												
NONRECURRING								1.0				1.0
KIT							5	18.0	28	109.4	33	127.4
DATA								2.1				2.1
SUPPORT-EQUIP								2.0				2.0
TOTAL							5	23.1	28	109.4	33	132.5

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 09 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO JTIDS TADIL J

MODELS OF AIRCRAFT AFFECTED: E-3A

DESCRIPTION/JUSTIFICATION CONVERTS E-3 JTIDS FROM IJMS TO TADIL J MESSAGE STANDARD. REPLACES CLASS 1 JTIDS TERMINALS WITH CLASS 2 JTIDS TERMINALS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:							8	5.4	26	15.8	34	22.2
KITS							5	5.4	26	15.7	34	21.1
DATA										.3		.3
SUPPORT-EQUIP										.8		.8
TOTAL							8	5.4	26	16.8	34	22.2

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: E-4 COMMUNICATIONS ENHANCEMENTS

MODELS OF AIRCRAFT AFFECTED: E-4J

DESCRIPTION/JUSTIFICATION: PROVIDES NINE SUBSYSTEM ENHANCEMENTS TO EXISTING E-4B COMMUNICATION SYSTEMS. PRIORITY REQUIREMENT TO SUPPORT NEACP OPERATIONS. PROVIDES SIGNIFICANT IMPROVEMENTS TO COMMUNICATION CAPABILITY FROM NCA TO EXECUTING COMMAND CENTER. SYSTEMS TO BE INSTALLED UNDER THIS PROGRAM INCLUDE IMPROVED HIGH FREQUENCY SYSTEMS AND IMPROVED LOW TO MEDIUM FREQUENCY RECORD COMMUNICATION TERMINAL.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					4	18.0					4	18.0
ESTIMATES:												
NONRECURRING					1	7.5					1	7.5
KITS						8.0					3	8.0
DATA						.1						.1
SUP OMT-EQUI						2.4						2.4
TOTAL					4	18.0					4	18.0

ME MOD OF IMPLEMENTATION: INSTALLATION -- DEPOT  
LCAO TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO DIVERSITY RECEPTION EQUIPMENT

MODELS OF AIRCRAFT AFFECTED: E-43

DESCRIPTION/JUSTIFICATION MODIFIES THE ARC-96 LF/VLF SYSTEM TO INCORPORATE A TWO-CHANNEL  
PROCESSOR TO COMBINE THE PRESENT VERTICALLY POLARIZED SIGNALS WITH THE NEW HORIZONTALLY  
POLARIZED SIGNALS. THIS MOD WILL ALSO INCORPORATE THE MEECN MESSAGE PROCESSING MODE (MMPM).

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJT/EAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							1	9.6	3	11.9	4	21.5
ESTIMATE:												
NONRECURRING							1	4.0			1	4.0
KITS									3	8.2	3	8.2
DATA								2.0		3.7		5.7
TOOLING								3.6				3.6
TOTAL							1	9.6	3	11.9	4	21.5

METHOD OF IMPLEMENTATION INSTALLATION -- CONTRACTOR FACILITY  
LEAD TIME -- 15 MONTHS

• LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO GROUNDWAVE EMERGENCY NET

MODE S OF AIRCRAFT AFFECTED: E-43

DESCRIPTION/JUSTIFICATION PROVIDES U.S. STRATEGIC FORCES, MISSILE WARNING SITES, AND COMMAND CENTERS WITH THE ABILITY TO MAINTAIN CRITICAL LONG-RANGE CONNECTIVITY IN A NUCLEAR ENVIRONMENT. SYSTEM CONSISTS OF A NETWORK OF UNMANNED RADIO RELAY STATIONS AND USER TERMINALS.

OF PROGRAM	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							2	2.0	2	6.1	4	8.1
ESTIMATE,												
NONRECURRING							1	1.0			1	1.0
KITS							1	.9	2	1.9	3	2.8
DATA								.1				.1
TOOLING										4.2		4.2
TOTAL							2	2.0	2	6.1	4	8.1

ME MOD OF IMPLEMENTATION INSTALLATION -- CONTRACTOR LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO MILSTAR JHF TRANSITION

MODELS OF AIRCRAFT AFFECTED: E-43

DESCRIPTION/JUSTIFICATION THIS MODIFICATION REPLACES CURRENT AFSATCOM PROCESSORS, MODEMS, POWER AMPLIFIERS INPUT/OUTPUT DEVICES AND ANTENNAS WITH MILSTAR COMPATIBLE HARDWARE. ALL HARDWARE IS WELL WITHIN CURRENT STATE-OF-THE-ART TECHNOLOGY AND WILL REMAIN ON THE AIRCRAFT WHEN THE MILSTAR ENF CAPABILITY IS ADDED. THIS MODIFICATION IS REQUIRED TO TRANSITION THESE TERMINALS TO MILSTAR, RESOLVE A POTENTIAL FREQUENCY INTERFERENCE PROBLEM, CORRECT FOT&E DEFICIENCIES AND TO PROVIDE PROPER FREQUENCY-HOPPING ALGORITHM FOR COMPATABILITY WITH CHANGES BEING MADE TO THE AFSATCOM TRANSPONDER ON THE SATELLITE DATA SYSTEMS SPACECRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							4	10.6			4	10.6
ESTIMATE:												
NONRECURRING								.2				.2
KITS							4	9.0			4	9.0
DATA								.6				.6
SUPPORT-EQUIP								.8				.8
TOTAL							4	10.6			4	10.6

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO WABMCP UHF/FDM REPLACEMENT

MODELS OF AIRCRAFT AFFECTED: E-43

DESCRIPTION/JUSTIFICATION REPLACES PRIMARY WABMCP LINE-OF-SIGHT UHF COMMUNICATION SYSTEM WITH  
NUCLEAR HARDENED STATE-OF-THE-ART RADIOS AND A DIGITAL INTERCOMMUNICATIONS AND SWITCHING  
SYSTEM (LAISS).

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST							2	26.2	2	13.1	4	39.3
ESTIMATE:												
NONRECURRING							1	16.3			1	16.3
KITS							1	5.6	2	11.1	3	16.7
DATA								4.3		2.0		6.3
TOTAL							2	26.2	2	13.1	4	39.3

METHOD OF IMPLEMENTATION INSTALLATION -- CONTRACTOR FACILITY  
LEAD TIME -- 18 MONTHS



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO SOF IMPROVEMENTS

MODELS OF AIRCRAFT AFFECTED: HH-53C

DESCRIPTION/JUSTIFICATION MODIFICATION INCLUDES: SATCOM, NVG LIGHTING, MISSILE WARNING RECEIVER, RADAR WARNING RECEIVER, SECURE COMM., INS DOPPLER, .50 CAL. MACHINE GUN, INTERNAL AUX FUEL TANKS AND INFRARED COUNTERMEASURES. THIS MODIFICATION MEETS THE REQUIREMENTS OF THE SOF MASTER PLAN.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:							2	2.5	3	6.0	5	8.5
NONRECURRING							1	1.0			1	1.0
KITS							1	1.4	3	4.4	4	5.8
DATA								.1		.2		.3
SUPPORT-EQUIP										.8		.8
ACD OF SPARES										.6		.6
TOTAL							2	2.5	3	6.0	5	8.5

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO H-5, SLEP, MN-136288

MODELS OF AIRCRAFT AFFECTED: H-53

DESCRIPTION/JUSTIFICATION THIS EFFORT IS THE SERVICE LIFE EXTENSION PROGRAM (SLEP), OF SIXTEEN (16) INITIATIVES WHICH INCLUDE: A MAJOR REFURBISHMENT OF THE FUSELAGE, ELECTRICAL AND HYDRAULIC SYSTEMS. THE MAIN ROTOR AND TAIL PYLON WILL BE REPLACED, ENGINE AND ACCESSORY GEARBOXES WILL BE UPGRADED, ALONG WITH LANDING GEAR, ENGINE, SWASHPLATE, SELF-RETAINING BOLTS AND TAIL RO BLADE IMPROVEMENTS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					1	18.8	12	45.4	31	122.9	44	187.1
ESTIMATE:												
NONRECURRING					1	17.3					1	17.3
KITS							12	35.4	31	98.8	43	134.2
DATA						1.0		2.5				3.5
SUPPORT-EQUIP						.5		3.1				3.6
SIM/TRAINER								.2				.2
MOD OF SPARES								4.2		24.1		28.3
TOTAL					1	18.8	12	45.4	31	122.9	44	187.1

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 36 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO TAIL PYLON REPLACEMENT, MN-62173A

MODELS OF AIRCRAFT AFFECTED: M-55

DESCRIPTION/JUSTIFICATION BECAUSE OF CONTINUING CRACK PROPAGATION IN THE TAIL PYLON, IT HAS BEEN DETERMINED THAT A NEW PYLON OF GREATER STRUCTURAL INTEGRITY IS REQ'D. THERE HAVE BEEN 8 FAILED PYLON FITTINGS SINCE 1978. THERE IS A POSSIBILITY OF CATASTROPHIC FAILURE IF SUCH CRACKING GOES UNNOTICED. THERE IS ONLY ONE SERVICEABLE SPARE PYLON AVAILABLE, AND REPAIR LEAD TIME IS 39 MONTHS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					16	5.3	29	7.7			45	13.0
ESTIMATE												
NONRECURRING					1	1.1					1	1.1
KITS					15	3.8	29	7.7			44	11.5
DATA						.4						.4
TOTAL					16	5.3	29	7.7			45	13.0

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 27 MONTHS

LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT AIR FORCE

MODIFICATION TITLE AND NO MILSTAR AFSATCOM TERM UPGRADE/DUAL MODEM

MODELS OF AIRCRAFT AFFECTED: KC-10

DESCRIPTION/JUSTIFICATION MODIFICATION PROVIDES PRINTED CIRCUIT BOARD REPLACEMENTS FOR THE AFSATCOM TERMINAL DUAL MODEM MODIFICATION REQUIRED TO TRANSITION THESE TERMINALS TO MILSTAR, RESOLVE A POTENTIAL FREQUENCY INTERFERENCE PROBLEM, CORRECT FOT&E DEFICIENCIES AND TO PROVIDE PROPER FREQUENCY-HOPPING ALGORITHM FOR COMPATIBILITY WITH CHANGES BEING MADE TO THE AFSATCOM SATELLITE TRANSPONDER ON THE SATELLITE DATA SYSTEMS SPACECRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					60	3.3					60	3.3
BASIS FOR COST												
ESTIMATE:												
NONRECURRING						.2						.2
KITS					60	2.0					60	2.0
DATA						.3						.3
SUPPORT-EQUIP						.4						.4
SIM/TRAINER						.4						.4
TOTAL					60	3.3					60	3.3

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 11 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO KC-10 CARGO LOADING SYSTEM

MODELS OF AIRCRAFT AFFECTED: KC-10A

DESCRIPTION/JUSTIFICATION MODIFICATION PROVIDES A TRANSPORTABLE PALLET LOADER FOR THE KC-10A AIRCRAFT. IT CONSISTS OF A WINCH AND PORTABLE PALLET LOADER TO ALLOW TRANSPORT OF PALLET SIZED LOADS OF EQUIPMENT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
							14	4.2	46	18.6	60	22.8
BASIS FOR COST												
ESTIMATE:												
NONRECURRING												
KITS							14	3.8	46	17.8	60	21.6
DATA										.4		.4
SUPPORT-EQUIP										.4		.4
TOTAL							14	4.2	46	18.6	60	22.8

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ADVANCED DEFENSE SYSTEM

MODELS OF AIRCRAFT AFFECTED: TR-1

DESCRIPTION/JUSTIFICATION PROVIDES NEW PASSIVE DEFENSIVE SYSTEMS TO COUNTER THE PROJECTED THREAT.  
SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
			5	9.0	3	6.3	4	7.7	5	10.9	17	33.9
BASIS FOR COST												
ESTIMATE:												
NONRECURRING				.1								.1
KITS			5	8.6	3	6.3	4	7.7	5	10.9	17	33.5
DATA				.1								.1
SUPPORT-EQUIP				.2								.2
TOTAL			5	9.0	3	6.3	4	7.7	5	10.9	17	33.9

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO SENIOR CLASS

MODELS OF AIRCRAFT AFFECTED: TR-1

DESCRIPTION/JUSTIFICATION THIS PROGRAM PROVIDES IMPROVED SYSTEM CAPABILITIES FOR THE TR-1.  
SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEA <sup>0</sup>		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					1	4.3	2	5.1	6	14.9	9	24.3
ESTIMATE:												
NONRECURRING						.1						.1
KITS					1	3.0	2	5.1	6	14.9	9	23.0
DATA						.5						.6
SUPPORT-EQUIP						.6						.6
TOTAL					1	4.3	2	5.1	6	14.9	9	24.3

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 9 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO HAVE QUICK II-OTHER IMPROVEMENTS

MODELS OF AIRCRAFT AFFECTED: MULTI

DESCRIPTION/JUSTIFICATION IMPROVES THE JAM RESISTANCE OF HAVE QUICK RADIOS BY INCREASING THE POWER  
AND PROVIDING FINER FREQUENCY RESOLUTION AND ALTERNATE TIME DISSEMINATION.

SCOPE 0 PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					1665	13.6	4524	19.3	4510	22.1	10699	55.0
BASIS FOR COST												
ESTIMATE:												
NONRECURRING				2.5								2.5
KITS			1665	7.1	4524	16.3	4510	19.8	10699	43.2		
DFTA				1.5		1.0		1.1		3.6		
SUPPORT-EQUIP				2.5		2.0		1.2		5.7		
TOTAL					1665	13.6	4524	19.3	4510	22.1	10699	55.0

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 16 MONTHS

\* LESS THAN \$ 50,000



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO STD. COMBINED ALTITUDE RADAR ALTIMETER , MN-10611C

MODELS OF AIRCRAFT AFFECTED: MULTI

DESCRIPTION/JUSTIFICATION REPLACES EXISTING RADAR ALTIMETER ON A VARIETY OF AIRCRAFT WITH A NEW SOLID STATE ALTIMETER SYSTEM WHICH WILL MEET ARINC SPECIFICATIONS OF A MTBF OF GREATER THAN 2000 HOURS. IT WILL BE A DIRECT REPLACEMENT ACTION ON ALL BUT THE C- 30 AIRCRAFT, WHICH WILL REQUIRE DEPOT LEVEL WIRING CHANGES. EXISTING SYSTEMS HAVE LOW RELIABILITY AND HIGH LOGISTIC SUPPORT COSTS.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	1064	19.8	11	19.6	757	12.6	1395	16.1			4323	68.1
BASIS FOR COST ESTIMATE:												
NONRECURRING	27	4.4									27	4.4
KITS	1037	14.1	1107	14.5	757	9.3		14.1			4296	52.0
DATA		1.0		.1		*		.1				1.2
SUPPORT EQUIP		.1										.1
TRAINER/SIMUL		.2	(37)	5.0	(40)	3.3	(18)	1.9				10.4
TOTAL	1064	19.8	1107	19.6	757	12.6	1395	16.1			4323	68.1

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 9 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO TTU 235 S.E. UPDATE, MN-122053

MODELS OF AIRCRAFT AFFECTED: MULTI

DESCRIPTION/JUSTIFICATION UPDATES THE FIELD TEST SET PRESSURE AND TEMPERATURE TTU-205 TO STATE-OF-THE-ART BY INSTALLING HIGH RELIABILITY COMPONENTS. THE TTU-205 HAS A LOW MEAN TIME BETWEEN FAILURE (MTBF) DUE TO OPERATION IN EXTREME ENVIRONMENTAL CONDITIONS AND AGE OF ITS COMPONENTS. THE MTBF IS EXPECTED TO INCREASE FROM 100 TO 1000 HOURS. THIS TESTER IS REQUIRED FOR TESTING ALL FIRST LINE AIRCRAFT PRIOR TO TAKE OFF.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	256	8.9	503	16.3	525	13.9	169	5.1			1550	44.2
NONRECURRING		.2										.2
KITS	256	5.2	600	16.3	525	13.9	169	5.1			1550	40.5
DATA		3.5										3.5
TOTAL	256	8.9	603	16.3	525	13.9	169	5.1			1550	44.2

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION; AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO APN-69 REPLACEMENT, MN-12611B

MODELS OF AIRCRAFT AFFECTED; MULTI

DESCRIPTION/JUSTIFICATION THE CURRENT REFUELING RENDEZVOUS RADAR BEACON IS BECOMING NON SUPPORTABLE AND REQUIRES REPLACEMENT. A COMMON BEACON WILL REPLACE THE CURRENT SYSTEM IN STRATEGIC REFUEL-  
ABLE AIRCRAFT.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST					5	2.7	194	17.0	814	72.2	1013	91.9
ESTIMATE;												
NONRECURRING			5	2.7							5	2.7
KITS							194	15.9	814	72.2	1008	88.1
DATA								.8				.8
SUPPORT-EQUIP								.3				.3
TOTAL					5	2.7	194	17.0	814	72.2	1013	91.9

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

-86 APPROPRIATION; AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO AN/APN-59E(V) RADAR IMPROVEMENT, MN-126198

MODELS OF AIRCRAFT AFFECTED; MULTI

DESCRIPTION/JUSTIFICATION PROVIDES THE FOLLOWING IMPROVEMENTS TO THE AN/APN-59E RADAR: (A) REDUCE THE HIGH RATE OF BURN SPOTS ON THE NAVIGATORS IF-239B INDICATOR, (B) ELIMINATE RANDOM HEADING MARKS (C) IMPROVE THE ANTENNA GIMBAL CAGE LATCHING MECHANISM, (D) REDUCE ANTENNA AZIMUTH MOTOR DRIVE TRANSISTOR FAILURE, (E) REDUCE MAGNETRON FAILURE, (F) REDUCE RECEIVER-TRANSMITTER THYRATRON FAILURE/FIRE POTENTIAL, (G) SUPPRESS TRANSIENT FAILURES ON 28 VOLT DC LINE, (H) MAKE MINOR CHANGES TO THE RECEIVER-TRANSMITTER TO REDUCE MAINTENANCE MAN-HOURS.

TYPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
SIS FOR COST	6	.9	231	3.0	730	5.2	437	3.3			1404	12.4
ESTIMATE:												
NONRECURRING	6	.9									6	.9
TS			231	1.5	730	5.2	437	3.3			1398	10.0
TA				.3								.3
UPPORT EQUIP			(1)	.3								.3
OF SPARES			(124)	.9								.9
TAL	6	.9	231	3.0	730	5.2	437	3.3			1404	12.4

METHOD OF IMPLEMENTATION INSTALLATION -- DEPOT/FIELD TEAM  
LEAD TIME -- 17 MONTHS

LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO ALE-40 IMPROVEMENTS, MN-13614B

MODELS OF AIRCRAFT AFFECTED: MULTI

DESCRIPTION/JUSTIFICATION THE ALE-40 SYSTEM IS EXPERIENCING NUMEROUS FAILURES CAUSING THE CHAFF/FLARES TO FIRE RANDOMLY OR NOT AT ALL. THE MALFUNCTIONS CONSIST OF PROGRAMMER INTERMITTENT PROBLEMS, AND SERIOUS CORROSION IN VARIOUS LOCATIONS. THESE MALFUNCTIONS HAVE REDUCED RELIABILITY TO UNACCEPTABLE LEVELS. THE MOD WILL RETROFIT NEW CORROSION RESISTANT BREECH PLATES AND SWITCHES, UPGRADED PROGRAMMER CIRCUIT CARDS, AND MORE DAMAGE TOLERANT COMPONENTS ON THE A-7, A-10, F-4, F-16, AND HH-53.

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST			425	12.6	700	16.8	1401	32.4			2526	61.8
ESTIMATE:												
NONRECURRING			5	1.6							5	1.6
ITS			420	10.0	700	16.8	1401	32.4			2521	59.2
ATA				1.0								1.0
SUPPORT-EQUIP				*								
TOTAL			425	12.6	700	16.8	1401	32.4			2526	61.8

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 6 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

B6 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO HF SINGLE SIDE BAND RADIO, MN-16620C

ELLS OF AIRCRAFT AFFECTED: MULTI

DESCRIPTION/JUSTIFICATION THIS MODIFICATION INSTALLS THE AN/ARC-190(V) HF SINGLE SIDE BAND (SSB) RADIO. CURRENT RADIOS DO NOT MEET THE 1980 REQUIREMENTS FOR CHANNEL SPACING, FREQUENCY ACCURACY AND STABILITY AND PARKHILL COMPATIBILITY. THE ARC-123 AND AT-440 HAVE HIGH LOGISTICS SUPPORT COSTS BECAUSE OF UNRELIABLE TUBE TYPE EQUIPMENTS, LOW MEAN TIME BETWEEN DEMAND, AND OBSOLETE DESIGN ON MANY SUB-ASSEMBLIES. STANDARDIZATION OF HF RADIOS WILL PROVIDE SUBSTANTIAL LOGISTICS COST REDUCTIONS.

TYPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
ESTIMATE;	1672	73.3	385	26.0	647	26.0	927	33.1	840	35.2	4471	193.6
RECURRING	27	13.2	3	2.4	3	.4			4	2.2	37	23.2
	1645	41.4	382	12.5	644	22.7	927	31.4	836	30.4	4434	138.4
PORT-EQUIP		8.3		3.1		.9		.4		.8		13.5
NER		3.7		2.0		1.1		1.3		1.1		9.2
		1.7		6.0		.9				.7		9.3
L	1672	73.3	385	26.0	647	26.0	927	33.1	840	35.2	4471	193.6

MOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 12 MONTHS

LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

IFICATION TITLE AND NO STANDARD CENTRAL AIR DATA COMPUTER, MN-416528

ELS OF AIRCRAFT AFFECTED: MULTI

SCRIPTION/JUSTIFICATION REPLACES ELECTRO-MECHANICAL/ANALOG COMPUTERS IN A-7, C-141, C-5, F-4 AND THE FB-111 WITH A NEW STANDARD CADC. THE NEW COMPUTER USES SOLID STATE SENSORS AND DIGITAL CIRCUITS. ITS RELIABILITY/MAINTAINABILITY ARE GREATLY IMPROVED BY PROVIDING CAPABILITY TO PERFORM INTERNAL TESTS TO LOCALIZE FAULTS WITHIN THE DEFECTIVE MODULE.

PE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
SIS FOR COST ESTIMATES:			508	33.5	685	35.0	766	45.2	438	28.6	2397	142.3
TS			508	24.8	685	33.4	766	43.7	438	26.6	2397	128.5
TA				2.7								2.7
UPPORT EQUIP				4.5		1.6		1.5		2.0		9.6
MODULATORS				1.5								1.5
TOTAL			508	33.5	685	35.0	766	45.2	438	28.6	2397	142.3

METHOD OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

FUNCTION TITLE AND NO APQ-122 RADAR REPLACEMENT, MN-126033

NUMBER OF AIRCRAFT AFFECTED: MULTI

DESCRIPTION/JUSTIFICATION THE CURRENT WEATHER RADAR ON THE E-4/T-43/MC-130 HAS UNACCEPTABLE LOW RELIABILITY. THIS SYSTEM WILL BE REPLACED TO REDUCE LIFE CYCLE COSTS AND ENHANCE OPERATIONAL READINESS.

PROGRAM	PRIOR		FY-85		FY-86		FY-87		OJTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
							6	23.5	63	56.1	69	79.6
R COST												
MATERIALS							2	2.7			2	2.7
REPAIRS							4	4.6	63	56.1	67	60.7
								9.3				9.3
EQUIP								5.8				5.8
NEW								1.1				1.1
							6	23.5	63	56.1	69	79.6

IMPLEMENTATION INSTALLATION -- DEPOT  
LEAD TIME -- 18 MONTHS



MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

6 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

IFICATION TITLE AND NO RECONFIGURE PRODUCTION C-20 ACFT

ELS OF AIRCRAFT AFFECTED: C-23A

RIPTION/JUSTIFICATION MODIFICATION OF FIRST THREE PRODUCTION COMMERCIAL CONFIGURATION AIRCRAFT TO FULL SPECIAL AIR MISSION CONFIGURATION AS REQUIRED OF REMAINING PRODUCTION (EIGHT ACFT). RESPONDS TO PBD 159 (11-20-84) AND PBD 692 (11-27-84). MAJOR MODIFICATIONS INCLUDE: (1) REPL. OF THE CURRENT DC ELECTRICAL SYSTEM AND DUAL INS WITH AN AC ELECTRICAL SYSTEM AND TRIPLE RING LASER GYRO INS, (2) INSTALLATION OF A COMMUNICATIONS OPERATOR'S CONSOLE WHICH CONTROLS ALL PASSENGER COMMUNICATIONS CAPABILITIES, AND (3) ADDITION OF TWO FULL DUPLEX HF RADIO SYSTEMS, A FULL DUPLEX UHF SATCOM SYSTEM, A FULL DUPLEX VHF/FM RADIO SYSTEM, DIGITAL FACSIMILE, AND ASSOCIATED ENCRYPTION DEVICES AND ANTENNAS.

NAME OF PROGRAM	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
IS FOR COST ESTIMATE:							3	12.8			3	12.8
							3	12.8			3	12.8
TOTAL							3	12.8			3	12.8

METHOD OF IMPLEMENTATION INSTALLATION -- CONTRACTOR FACILITY  
LEAD TIME -- 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

ICATION TITLE AND NO CLASSIFIED PROJECTS

S OF AIRCRAFT AFFECTED: MULTI-AIRCRAFT

PTION/JUSTIFICATION THESE FJNDS ARE REQUIRED TO PROVIDE FOR THE MODIFICATION OF VARIOUS AIR-  
CRAFT AND AIRBORNE SYSTEMS USED IN CLASSIFIED MISSIONS, WHICH BECAUSE OF THEIR SENSITIVE NATURE  
REQUIRE THE APPLICATION OF SPECIAL MANAGEMENT AND SECURITY SAFEGUARDS. SPECIAL JUSTIFICATIONS  
ARE PROVIDED THROUGH CLASSIFIED INTELLIGENCE CHANNELS.

OF PROGRAM	PRIOR		FY-85		FY-86		FY-87		OJT YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
FOR COST		402.7		152.6		114.4		119.8		227.0		1016.5
ESTIMATE:		402.7		152.6		114.4		119.8		227.0		1016.5
IFIED		402.7		152.6		114.4		119.8		227.0		1016.5

OF IMPLEMENTATION INSTALLATION -- ORG/INTERMEDIATE  
LEAD TIME -- 00 MONTHS

MODIFICATION OF AIRCRAFT  
FY-86 PROGRAM

FY-86 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO CARGO CONVERTIBILITY, MN-3080

MODELS OF AIRCRAFT AFFECTED: CRAF

DESCRIPTION/JUSTIFICATION PROVIDES FUNDING TO ADD CARGO-CONVERTIBILITY FEATURES TO WIDE-BODY COMMERCIAL AIRCRAFT (B-747 AND/OR DC-10). THE MODIFICATIONS INCLUDE THE ADDITION OF A SIDE CARGO DOOR, STRENGTHENED FREIGHTER FLOOR, AND REMOVABLE POWERED CARGO HANDLING SYSTEM. MODIFIED AIRCRAFT WILL BE AVAILABLE FOR DOD USE THROUGH THE CIVIL RESERVE AIR FLEET. THEY WILL SUPPLEMENT OUR ORGANIC AIRLIFT CAPABILITY IN THE EVENT OF A NATIONAL EMERGENCY. THIS MODIFICATION REPLACES CURRENTLY INSTALLED VHF OMNI-DIRECTIONAL RANGE/INSTRUMENT LANDING SYSTEMS (VOR/ILS).

SCOPE OF PROGRAM

	PRIOR		FY-85		FY-86		FY-87		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	11	339.9	4	126.6	5	164.9					20	631.4
BASIS FOR COST												
ESTIMATE:												
DC-10	1	15.0									1	15.0
B 747	10	324.9	4	126.6	5	164.9					19	616.4
TOTAL	11	339.9	4	126.6	5	164.9					20	631.4

METHOD OF IMPLEMENTATION INSTALLATION -- CONTRACTOR FACILITY  
LEAD TIME -- 18 MONTHS

\* LESS THAN \$ 50,000